Newfoundland and Labrador

The Economy 1989

THE ECONOMY 1989

Second Edition

Published by:

Economic Research & Analysis Division
Cabinet Secretariat

Under the Authority of:

Winston Baker
President of the Executive Council

89-05144/

This second printing of THE ECONOMY 1989 contains minor content changes in addition to a number of editorial changes including a renumbering of the pages.

FOREWORD

THE ECONOMY is an annual publication which has, in the past, been primarily intended to provide its readers with an analysis and review of economic performance in Newfoundland and Labrador during the previous year and an economic outlook for the current year. In addition to this primary function, the 1987 and 1988 editions of THE ECONOMY also provided a detailed analysis of the nature, structure and, in some cases, historical development of the Province's economy, particularly at the industry level. While this new approach was well received by many of our readers, we have found that for readers interested primarily in performance and outlook information, this additional coverage makes for a rather lengthy document. As well, the reference material contained in some sections does not change appreciably from one year to the next. We have decided therefore that this additional, more detailed material would be better suited to a reference document on the Newfoundland and Labrador economy, one which is separate from THE ECONOMY. This will permit THE ECONOMY to serve its original function as a performance review and outlook document while the reference document will provide a source of detailed information on the Provincial economy in a separate publication for those readers who find this type of material useful.

THE ECONOMY 1989 contains detailed information on the performance of the Provincial economy last year and the outlook for 1989. Readers who require a brief synopsis only are referred to the summaries at the beginning of the publication and also to Section III, *Overview of Economic Conditions*.

The research, writing and co-ordination of an annual publication such as this is always a complex process and while every attempt has been made to include only the most up-to-date information available, in some instances data contained in tables, diagrams and analyses will have been revised between the time of writing and the date of release.

THE ECONOMY 1989 has been considerably enhanced by the excellent suggestions and willing contributions of a number of individuals. In particular, the Economic Research and Analysis Division would like to thank: George Courage and the staff of the Newfoundland Statistics Agency; M.J. Woodman, Connie Hawkins, Canada Mortgage and Housing Corporation; Anne Marie Hann, Cabinet Secretariat; Albert Williams, Treasury Board Secretariat; Tom Howley, Newfoundland Dockyard Corporation; Nancy Smith, Royal LePage Real Estate Services Ltd.; Dave Fox, Leo Browne, Ports Canada; Doug Burgess, Marine Atlantic; Ken Andrews, Paul Dean, Tony Burgess, Department of Mines; Frank Power, Department of Fisheries; Gilbette Nolan, Anne Russell, Tim Hsu, Martin Foubert, Department of Fisheries and Oceans Canada; Mike Handrigan, Fishing Industry Advisory Board; Dave Hawkins, Department of Energy; Tom Beckett, Department of Transportation; Bill Moyse, Canadian Saltfish Corporation; Robert Peters, Muhammad Nazir, Albert King and other staff of the Department of Forestry; Clyde Granter, Marilyn Singleton, Roger Haynes, and other staff of the Department of Development and Tourism; Brian McClay, Manon Dumais, Canadian Pulp & Paper Association; Robert Pelley, Canadian Intergovernmental Conference Services; Ted O'Keefe, Kevin Whittle, Offshore Petroleum Board; Eric Patey, Marystown Shipyard Ltd.; Paul Timmins, Albright and Wilson; Marilou Rossiter, Saga Communications; Doug Trask, Newfoundland and Labrador Hydro; Douglas Bradbury, Harbour Grace Fishing Company Ltd.; John Bradbury, Bay Trading Company Inc.; Ellison Butt, Harbour Master, Corner Brook; George Orescan, Newfoundland Processing Limited; Philip McCarthy, Department of Rural, Agricultural and Northern Development; J. Paul Walsh, Newfoundland Light and Power. In addition, a number of individuals contributed to the development of the *Inventory of Major Projects* which appears in the final pages of this publication.

Special thanks is extended to Gary McManus of the Memorial University of Newfoundland Cartographic Laboratory (MUNCL); the staff of Robinson Blackmore Printing and Publishing Ltd.; and to Walter Hudson and the staff of Printing and Micrographic Services Division for the cheerful and patient co-operation which they always demonstrate throughout the typesetting and printing process.

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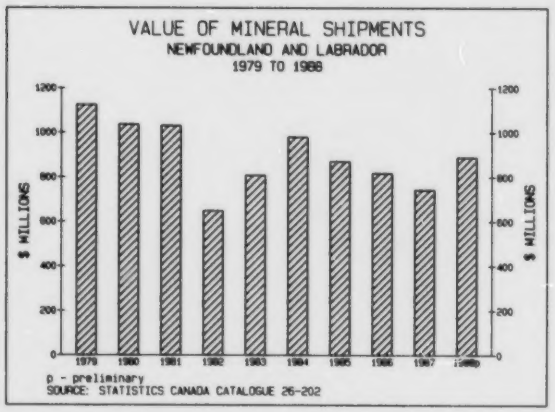
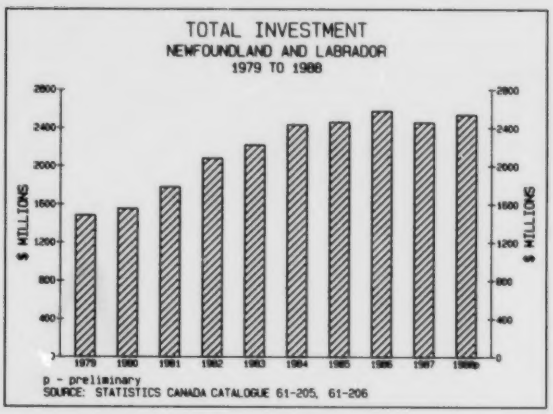
GRAPHICAL STATISTICAL INDICATORS

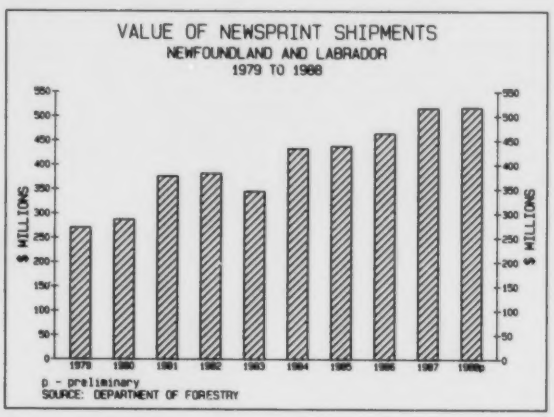
1979 - 1988

NEWFOUNDLAND AND LABRADOR

GROSS DOMESTIC PRODUCT AT FACTOR COST
CONSTANT 1981 DOLLARS
NEWFOUNDLAND AND LABRADOR, 1979 TO 1988
$ MILLIONS
e - estimate
SOURCE: NEWFOUNDLAND STATISTICS AGENCY; 1987 & 1988 ESTIMATED BY ECONOMIC RESEARCH & ANALYSIS DIVISION, CABINET SECRETARIAT


VALUE OF MINERAL SHIPMENTS
NEWFOUNDLAND AND LABRADOR
1979 TO 1988
$ MILLIONS
p - preliminary
SOURCE: STATISTICS CANADA CATALOGUE 26-202


TOTAL INVESTMENT
NEWFOUNDLAND AND LABRADOR
1979 TO 1988
$ MILLIONS
p - preliminary
SOURCE: STATISTICS CANADA CATALOGUE 61-205, 61-206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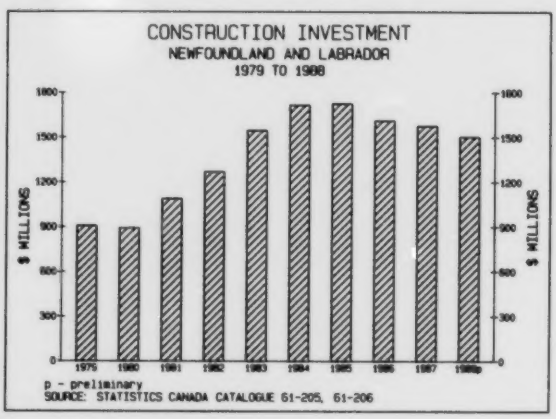
NEWFOUNDLAND AND LABRADOR
1979 TO 1988
$ MILLIONS
p - preliminary
SOURCE: DEPARTMENT OF FORESTRY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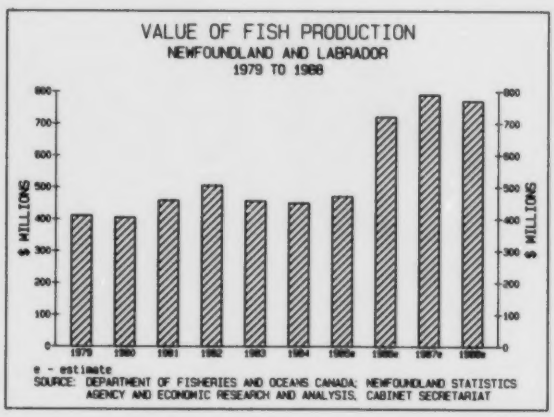
NEWFOUNDLAND AND LABRADOR
1979 TO 1988
$ MILLIONS
p - preliminary
SOURCE: STATISTICS CANADA CATALOGUE 61-205, 61-206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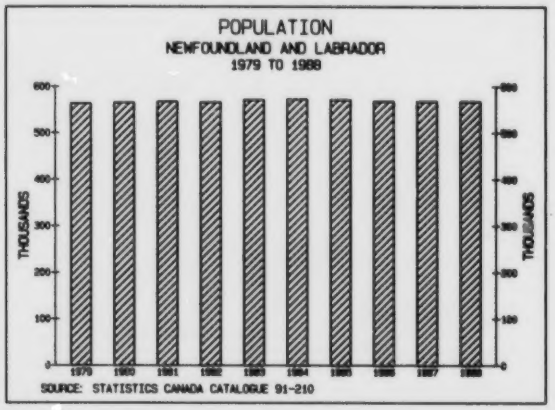
e - estimate
SOURCE: DEPARTMENT OF FISHERIES AND OCEANS CANADA; NEWFOUNDLAND STATISTICS AGENCY AND ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT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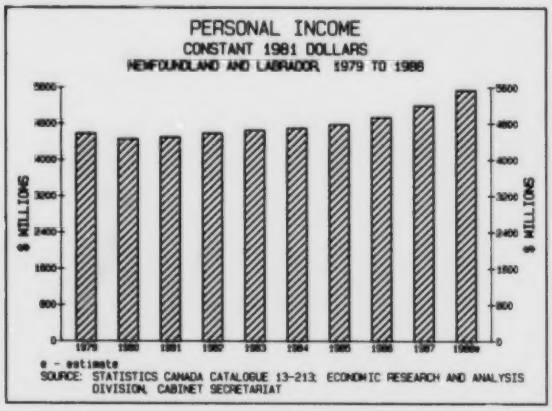
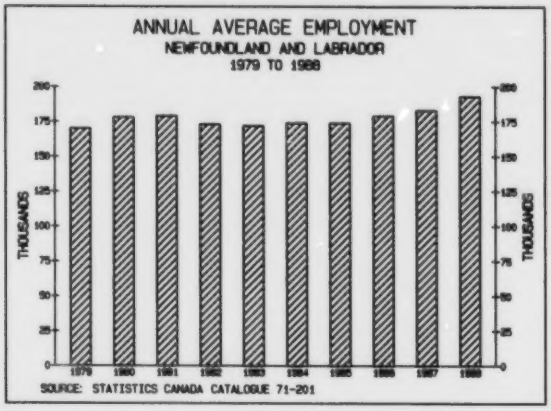
SOURCE: STATISTICS CANADA CATALOGUE 91-210


PERSONAL INCOME
CONSTANT 1981 DOLLARS
NEWFOUNDLAND AND LABRADOR 1979 TO 1988
$ MILLIONS
e - estimate
SOURCE: STATISTICS CANADA CATALOGUE 13-213; ECONOMIC RESEARCH AND ANALYSIS DIVISION, CABINET SECRETARIAT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NEWFOUNDLAND AND LABRADOR
1979 TO 1988
THOUSANDS
SOURCE: STATISTICS CANADA CATALOGUE 71-201

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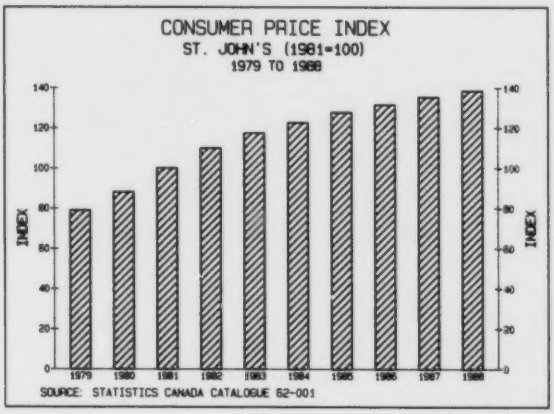
NEWFOUNDLAND AND LABRADOR
1979 TO 1988
$ MILLIONS
e - estimate
SOURCE: STATISTICS CANADA CATALOGUE 63-005

ANNUAL AVERAGE LABOUR FORCE
NEWFOUNDLAND AND LABRADOR
1979 TO 1988
THOUSANDS
SOURCE: STATISTICS CANADA CATALOGUE 71-201


CONSUMER PRICE INDEX
ST. JOHN'S (1981=100)
1979 TO 1988
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SOURCE: STATISTICS CANADA CATALOGUE 62-001

SUMMARY OF ECONOMIC PERFORMANCE DURING 1988

International and Canadian:

- Real economic growth in the major industrialized countries averaged 4.1 percent; the United States and Japan, the Province's two main export markets, recorded real economic growth of about 3.8 percent and 5.7 percent, respectively.
- The Canadian economy grew by 4.5 percent compared to 4.0 percent in 1987.
- Canada's inflation rate averaged 4.1 percent and interest rates were generally higher than in the previous year.
- The Canadian dollar appreciated in value against all major currencies.
- Employment in Canada grew by 3.2 percent and the unemployment rate fell 1.0 percentage point to 7.8 percent.

Newfoundland and Labrador:

- Newfoundland and Labrador experienced real economic growth in 1988 as increases in both domestic and foreign demand for the Province's goods and services buoyed economic activity.
- Real Gross Domestic Product (GDP) increased by 3.8 percent in 1988, marking the sixth consecutive year of real GDP growth in Newfoundland and Labrador.
- Economic growth in the Province's goods and service producing industries led to an increase in both full-year and seasonal employment amounting to about 10,000 person-years in 1988, up by 5.5 percent over 1987. The gains in employment marked the third consecutive year of employment growth.
- The increase in full-year and seasonal employment exceeded labour force growth and led to a decline in the unemployment rate to 16.4 percent.
- Personal income advanced by 9.0 percent (6.5 percent in real terms) during 1988. Some of this increase resulted indirectly from the growth in seasonal employment during 1988 which meant that more people were eligible for Unemployment Insurance Benefits (UIB); UIB increased by 15.4 percent in 1988.
- Growth in personal income helped boost consumer spending. The value of retail trade rose by about 11.6 percent (about 9.0 percent in real terms) marking the fourth consecutive year in which strong real growth has been realized.
- Inflation remained low averaging only 2.4 percent, well below the national rate of 4.1 percent.
- Total investment grew by about 3.3 percent as strong increases in spending on machinery and equipment were more than sufficient to offset a decline in construction expenditures.
- The total value of mineral shipments increased by more than 30 percent.
- Mineral exploration activity reached record levels.

- The Province's fishing industry recorded a solid performance during 1988 despite lower prices for some fish products. The volume of fish landings rose by 9.0 percent and landed value advanced by 5.4 percent.

- The volume of newsprint production was constrained in 1988 by the strike at the Corner Brook mill and the mill's ongoing modernization program. Although the volume of newsprint production declined by 3.5 percent, the value of shipments rose by 0.2 percent.

- Pulpwood production in the Province increased by 5.6 percent during 1988.

- The Province's sawmilling industry performed well in 1988/89, with production at the highest level achieved since the 1940s.

- A number of manufacturers reported a favourable year in 1988:

  - Approximately 25.4 million barrels of refined petroleum products were produced in 1988 at the Come By Chance oil refinery.

  - Marystown Shipyard Ltd. experienced a high level of activity and near record employment levels.

  - The value of contracts received at the Newfoundland Dockyard totalled $13.1 million, an increase over the previous year. Employment at the Dockyard also rose in 1988.

- There was some improvement in the level of offshore oil and gas exploration drilling in 1988, although low oil prices continued to constrain activities.

- Employment in the construction industry was maintained at the levels achieved in 1987.

- Residential construction posted strong growth as housing starts rose by 18.1 percent.

- The real estate market in the St. John's area recorded an excellent performance during 1988 as the number of units sold through the Multiple Listing Service (MLS) rose by 16.2 percent.

- Tourism posted gains during 1988 with the total number of tourists visiting the Province rising by 4.3 percent and expenditures by 8.3 percent.

- The electric power industry experienced growth as the total Provincial load increased by 7.5 percent.

- Canada and Newfoundland signed a "Statement of Principles" with members of the Hibernia consortium in July to proceed with the development of the Hibernia oil field.

- Overall, real gains were recorded in both the goods and service producing industries.

SUMMARY OF ECONOMIC OUTLOOK FOR 1989

International and Canadian:

- Real economic growth among the major industrialized countries is expected to slow somewhat from the pace recorded in 1988; the economies of the United States and Japan are forecast to grow by 2.3 percent and 4.0 percent respectively, while the Canadian economy is expected to expand by 3.0 percent.
- Inflation and interest rates in Canada, as well as the value of the Canadian dollar, are expected to be higher.
- Employment in Canada is expected to grow by about 2.0 percent in 1989.

Newfoundland and Labrador:

- The outlook for the Provincial economy in 1989 is positive as real GDP is expected to grow by 2.8 percent. International demand for many of the Province's traditional commodity exports is expected to remain strong.
- As a result of growth in both the goods and service producing sectors in 1989, full-year and seasonal employment is expected to grow by 4,000 person years, representing the fourth consecutive year of sustained employment growth.
- The Province's labour force is expected to expand by less than employment and, as a result, the unemployment rate could fall for the fourth consecutive year to a level of 15.7 percent.
- Increased employment, coupled with higher average earnings per employee, is expected to spur labour income growth and, as a result, personal income is forecast to grow by 7.0 percent during the year.
- Inflation is forecast to advance by about 3.1 percent, less than the national rate of 4.7 percent.
- Increases in personal income would serve to boost consumer spending: the value of retail trade is expected to increase by about 7.0 percent.
- The outlook for the agriculture industry is positive as total farm cash receipts are expected to increase by 8.0 percent.
- The mining industry is forecast to record strong gains in 1989. Iron ore shipments are expected to remain stable although the value of shipments is expected to rise due to price increases.
- Mineral exploration is expected to continue increasing.
- The fishing industry is expected to register a decline in production and employment in 1989 due to reductions in groundfish quotas, particularly yellowtail flounder and northern cod.
- The outlook for the Province's newsprint industry is positive as newsprint production is expected to increase.
- Pulpwood production in the Province is expected to rise during 1989.

- The Province's sawmilling industry is expected to experience its seventh consecutive year of expansion in output.
- The outlook for a number of manufacturers is mixed:
  - Come By Chance oil refinery is expected to increase its operating rate to 90 percent, up from 70 percent in 1988.
  - Marystown Shipyard Ltd. will experience a lower level of activity during 1989.
  - Albright and Wilson Americas will close the Long Harbour phosphorus plant in early August 1989.
  - Newfoundland Dockyard will conduct a mid-life refit of the Department of Fisheries and Oceans vessel, the Hudson, a contract valued at $8.3 million.
- The Hibernia deal may be finalized during 1989 and Petro-Canada should be in a position to make a decision whether or not to develop the Terra Nova field.
- Oil and gas exploration activities in 1989 will be below the level recorded in 1988.
- Activity in the construction industry is expected to increase.
- Expenditures on improvements to the Province's transportation infrastructure and work associated with the development of the Hibernia oil field are expected to provide added stimulus to non-residential construction during the year.
- Total investment is expected to grow by 8.1 percent.
- Residential construction is expected to equal 1988 levels.
- The outlook for the real estate market is positive; real estate transactions are expected to increase, though more slowly than in 1988.
- Tourist activity is expected to increase.
- Overall, continued growth in both the goods and service producing industries is forecast during 1989.

I. INTERNATIONAL AND CANADIAN ECONOMIC ENVIRONMENTS

Changes in the international and Canadian economic environments have a significant bearing on the economic performance of Newfoundland and Labrador. In a highly integrated world economy, developments in both financial and product markets outside of the Province can have a direct impact on the Provincial economy through fluctuations in the demand for such products as fish and newsprint as well as through fluctuations in interest rates and exchange rates.

All major industrialized countries continued to experience real economic growth in 1988, as indicated in Table I.1, marking the sixth consecutive year of economic expansion since the recession of 1982. The stock market crash in the last quarter of 1987 did little to shake consumer and business confidence in 1988. Both consumer spending and business investment continued to expand, providing much of the impetus for economic growth. Inflation and interest rates in the G-7 countries were generally higher in 1988 than in the previous year. The rate of economic growth is expected to slow in 1989, however, the continued expansion of the international economy is expected to create favourable market conditions for the Province's exports.

TABLE I.1

REAL ECONOMIC GROWTH RATES IN THE MAJOR INDUSTRIALIZED (G-7) COUNTRIES

	Percent		
	1987	1988e	1989f
Canada	4.0	4.5	3.0
United States	3.4	3.8	2.3
Japan	4.3	5.7	4.0
United Kingdom	4.4	4.3	3.0
West Germany	1.8	3.4	2.0
France	2.2	3.2	2.5
Italy	3.1	3.5	3.0
G-7 Average	**3.3**	**4.1**	**2.7**

Notes: G-7 average is a weighted average of growth rates based on country shares of GDP/GNP.

e: estimate; f: forecast

Sources: Various, available on request.

Real Gross National Product (GNP) in the United States, the Province's key export market, grew by 3.8 percent in 1988. Increased exports and business investment in machinery and equipment were responsible, as they were in 1987, for much of the growth.

The volume of exports from the United States increased by about 17.7 percent in 1988. This was largely the result of the substantial depreciation of the American dollar against other currencies, a trend which began in 1985 and continued into 1988. The depreciation has served to make American exports cheaper in terms of foreign currency and thus more competitive. It has also made imports more expensive. Despite this fact, strong domestic demand for goods and services in the United States contributed to an 8.3 percent increase in the volume of imports. Nevertheless, the United States trade deficit improved from the record US$170 billion in 1987 to US$137 billion in 1988.

Continued growth of the United States economy since the 1981/82 recession has been reflected in labour market activity. Growth in employment has exceeded growth in the labour force for six consecutive years causing the unemployment rate to fall to an average of 5.5 percent in 1988, its lowest level since 1973.

The rate of inflation in the United States, as measured by the Consumer Price Index, was 4.0 percent in 1988, slightly higher than the 3.7 percent recorded in 1987. Increasing concerns over the potential for still higher inflation rates prompted a tightening of monetary policy and higher interest rates in 1988. The prime rate charged by banks in the United States increased from 8.75 percent at the end of 1987 to 10.50 percent at the end of 1988.

Economic growth in the United States is expected to be 2.3 percent in 1989, somewhat less than in 1988. Continued strong growth in exports and business investment, though at a slower pace than in 1988, should provide much of the impetus for increased economic activity. The rate of inflation is expected to increase in 1989 and this will lead to further tightening of monetary policy and consequently higher interest rates.

The Canadian economy experienced strong growth in 1988 as real Gross Domestic Product (GDP) increased by 4.5 percent. Canada's economic growth rate exceeded the average of the major industrialized (G-7) countries for the sixth consecutive year. Key contributors to growth in 1988 were business investment in plant and equipment and exports.

Business investment in plant and equipment grew by 17.8 percent in real terms during 1988, the largest increase recorded since 1956. The current investment boom may be traced to several factors including the improved financial position of Canadian companies through higher profits, a high level of business confidence in the economy, as well as the requirement for increased productive capacity brought about by the significant growth in output over the last few years.

The real value of exports from Canada grew by 8.8 percent in 1988. While the appreciation of the Canadian dollar against other currencies had a negative impact on the Country's export performance, this was more than offset by other factors including higher prices for key commodity exports and growth in foreign demand. Towards year-end, however, there were signs of a slowdown in export growth, a slowdown widely attributed to the appreciation of the Canadian dollar.

Canada's rate of inflation, as measured by the Consumer Price Index, averaged 4.1 percent in 1988 compared to 4.4 percent in the previous year. This decrease is, in part, attributable to both lower oil prices and the appreciation of the Canadian dollar (which lowers import prices). Excluding the more volatile food and energy prices, the Consumer Price Index increased by 4.8 percent compared with a lower rate of 4.6 percent in 1987. This rate of inflation which excludes food and energy prices is referred to as the core rate of inflation and is more indicative of underlying inflation trends. The upward pressure on the core rate of inflation has been largely attributed to the strength of the Canadian economy, especially in central Canada.

Diagram I.1

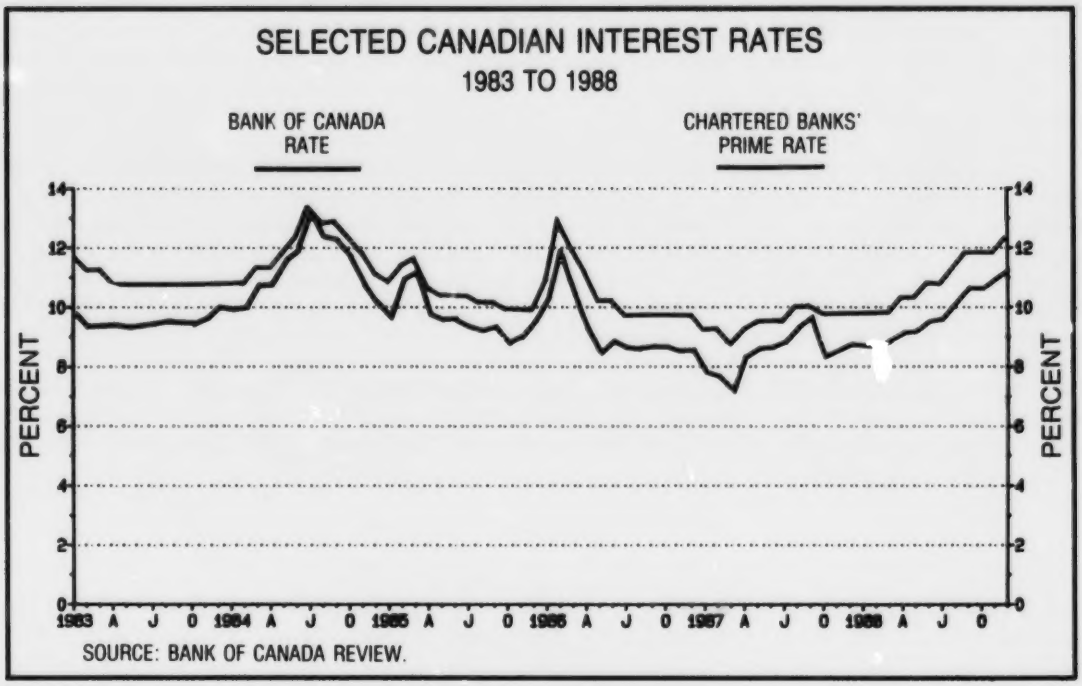
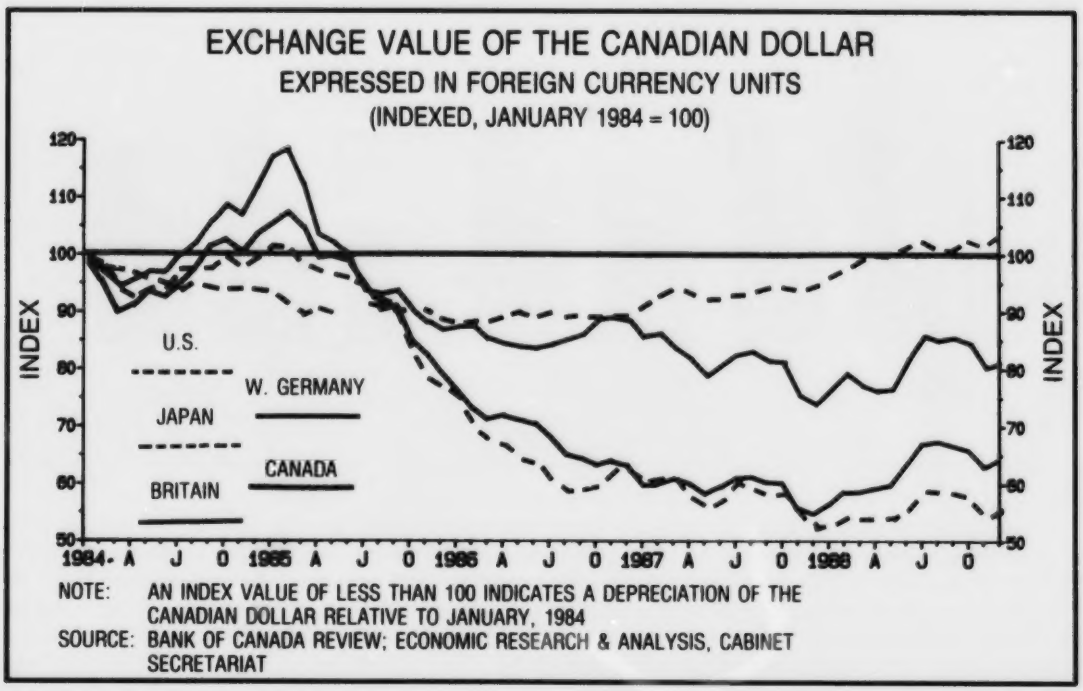


Diagram I.2

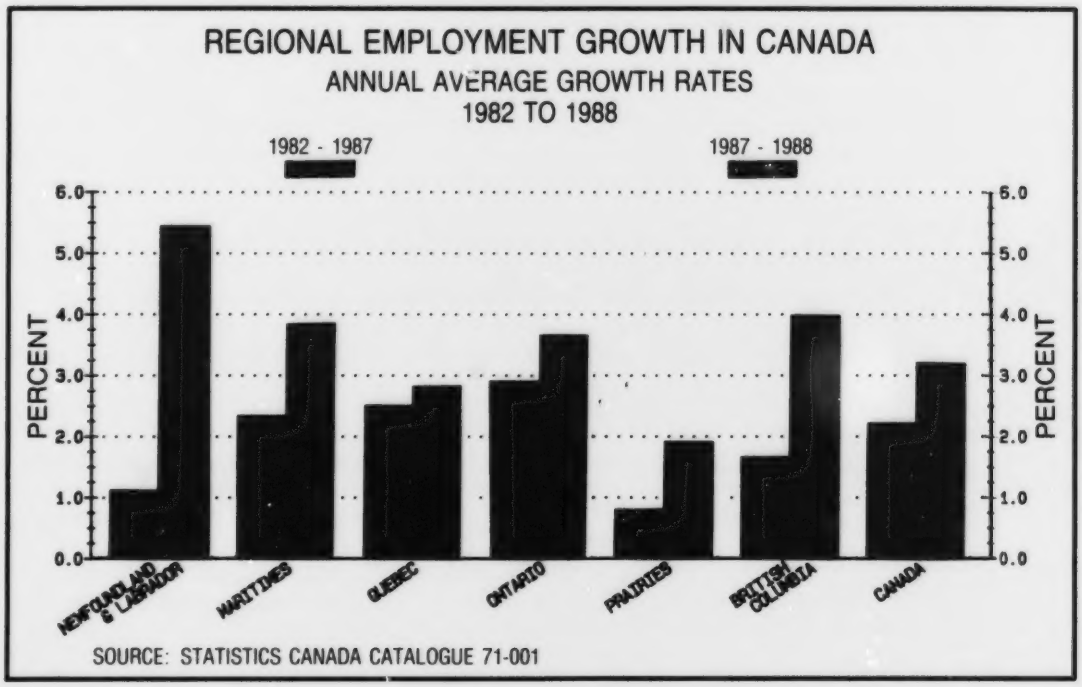


The Bank of Canada has pursued a more restrictive monetary policy over the last two years in response to the risk of further increases in inflation and this has led to rising interest rates. The Bank of Canada rate and the prime rate rose steadily during 1988, as Diagram I.1 illustrates. The prime rate was 12.25 percent at year-end, 2.5 percentage points higher than a year earlier. The interest rate rise was intended to slow growth in economic activity to a rate which would bring about lower inflation and thereby more stability in prices. The Bank continued to promulgate the view that price stability is most conducive to long term economic growth.

The Canadian dollar appreciated in value against all major currencies in 1988 as illustrated in Diagram I.2. The Canadian dollar appreciated against the American dollar from about US$0.765 at the end of 1987 to about US$0.836 at the end of 1988. The appreciation of the dollar has been attributed to several factors, including the strength of the Canadian economy; higher prices for many of the Country's key commodity exports including primary metals and paper and allied products; and higher interest rates in Canada than abroad which attract short-term international capital flows into Canada.

The dollar's appreciation has raised concerns that Canada's export industries will be adversely affected. The impact of the appreciation is, however, cushioned by the fact that the Canadian dollar (as well as the American dollar) is substantially lower in value against other major currencies than it was three years earlier.

Diagram I.3



Increased economic activity resulted in strong employment growth in 1988. Monthly average employment grew by 3.2 percent to 12.2 million in 1988. This led to a decline in the unemployment rate to 7.8 percent, a full percentage point lower than in 1987 and the lowest rate since 1981. Also, the participation rate (the number of people in the labour force as a proportion of the population of labour force age) and the employment/population ratio (the number of people employed as a proportion of the population of labour force age) both attained their highest levels ever, averaging 66.7 percent and 61.6 percent respectively.

Employment growth was higher in the Atlantic Provinces and British Columbia than in other regions of Canada in 1988. Employment in Newfoundland and Labrador grew by 5.5 percent, higher than in any other province as revealed in Diagram I.3. This reflects the fact that economic growth among the regions of Canada was more evenly distributed in 1988 compared to the five year period from 1982 to 1987 when economic and employment growth were concentrated in central Canada.

Substantial regional economic imbalances persisted in 1988, however, as only two provinces, Ontario and Saskatchewan, had unemployment rates below the national average. The unemployment rate in 1988 varied among the provinces from a high of 16.4 percent in Newfoundland and Labrador to a low of 5.0 percent in Ontario. Southern Ontario enjoyed a veritable economic boom in 1988 and labour shortages appeared in some occupations. The unemployment rate in Toronto averaged just 3.7 percent in 1988.

Economic growth in Canada is expected to continue in 1989 although at a more moderate pace than that recorded in 1988. Canada's real GDP is expected to increase by 3.0 percent with business investment in plant and equipment and consumer spending providing most of the increase. Investment will be spurred by the requirements of firms for higher capacity to meet increased demand, particularly in the manufacturing industry. The implementation of the Free Trade Agreement between Canada and the United States which began January 1, 1989 is expected to boost investment as Canadian companies endeavour to expand and become more competitive. Consumer spending is expected to be higher in 1989 due mainly to higher personal disposable income, which is primarily related to increased employment and earnings for workers.

The continued strengthening of the Canadian economy is expected to contribute to higher inflation in 1989, with the Consumer Price Index expected to increase by 4.7 percent. Labour shortages in some sectors have led to higher wage settlements, leading to increased costs and upward pressure on prices. Also, higher world oil prices and the effects of last summer's drought on the Prairies is expected to lead to higher food and energy prices for consumers.

Interest rates are expected to increase in 1989 due to higher inflation and the resolve of the Bank of Canada to prevent inflation from accelerating to even higher levels. The increase in interest rates will be lessened, however, should economic growth decelerate more quickly than anticipated.

Employment growth in Canada is expected to be about two percent this year which, in combination with anticipated slower growth in the labour force, will cause the unemployment rate to drop slightly to an average of 7.6 percent in 1989.

II. AN OVERVIEW OF THE NEWFOUNDLAND AND LABRADOR ECONOMY

The Newfoundland and Labrador economy may be best described as a primary resource based economy. Today, as in the past, the harvesting of fish and timber along with the extraction of minerals comprise the cornerstone of the Province's economy.

The output of the goods producing sector accounted for 37.3 percent of total Gross Domestic Product in the Province during 1987. Table II.1 outlines the composition of the goods producing sector and the distribution of Gross Domestic Product (GDP) attributed to the Province's goods industries in 1987.

TABLE II.1

THE NEWFOUNDLAND AND LABRADOR GOODS PRODUCING SECTOR GROSS DOMESTIC PRODUCT BY INDUSTRY AT FACTOR COST: 1987

	$ Millions	Percent of Total
Primary:		
Agriculture	22.0	0.9
Forestry	55.0	2.3
Fishing and Trapping	205.0	8.5
Mining, Quarries and Oil Wells	455.0	18.9
Total Primary	**737.0**	**30.6**
Manufacturing:		
Fish Products	330.0	13.7
Pulp and Paper Products	130.0	5.4
Other Manufactured Products	220.0	9.1
Total Manufacturing	**680.0**	**28.2**
Construction	610.0	25.3
Electric Power and Water Utilities	384.0	15.9
TOTAL GOODS PRODUCING SECTOR	**2,411.0**	**100.0**

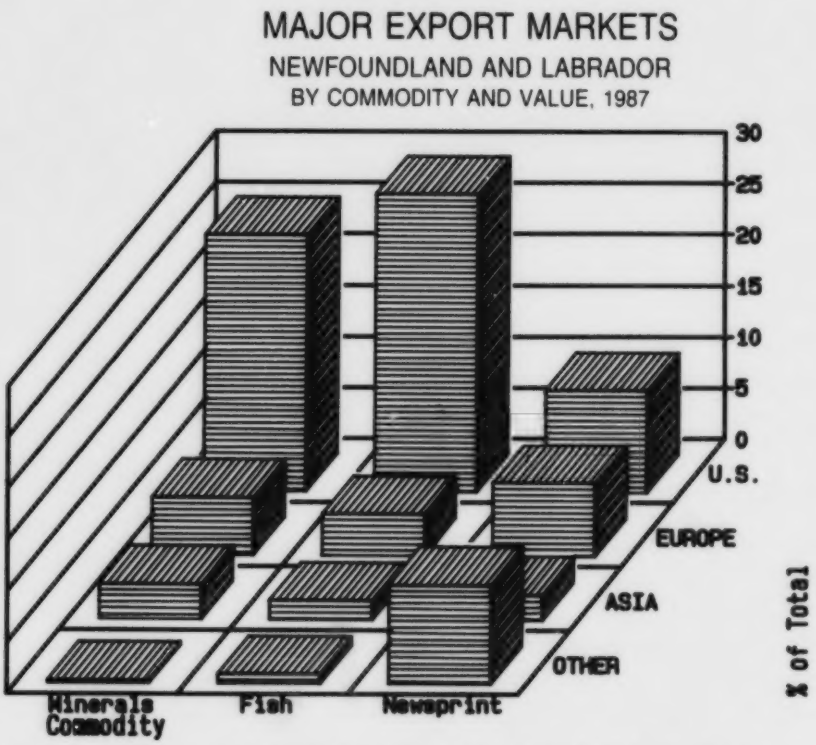
Source: Newfoundland Statistics Agency and Economic Research and Analysis Division, Cabinet Secretariat.

The harvesting and processing of fish and timber along with the extraction of minerals gives rise to about 49 percent of the output of the goods producing sector, as illustrated in Table II.1. The linkages between the Province's natural resources and the manufacturing industry are also demonstrated in this table. The processing of fish and the production of newsprint accounted for about two-thirds of total manufacturing GDP in 1987.

The Newfoundland and Labrador economy is linked to the economies of other countries as a result of its natural resource based exports. Historically, of the total value of goods shipped outside

the Province, mineral products (mainly iron ore), fish and newsprint account for the highest proportion. The total trade flows of these products from the Province in 1987 to non-Canadian markets are illustrated in Map II.1. While the relative importance of the markets highlighted in the map varies from year to year, the United States has been our most important customer for many years followed by Europe and Asia. Diagram II.1 highlights these important export markets in 1987, and illustrates the proportion of total exports for selected commodities shipped by destination. For example, about 34 percent of total exports in 1987 was mineral products whereas mineral products shipped to Asia accounted for about eight percent of total exports. In the same year, nearly 64 percent of total exports of these three commodity groups was shipped to markets in the United States. The most important export to the United States was fish products at about 29 percent of total exports followed by mineral products at about 25 percent of total exports. Other products exported to the United States (about 10 percent of total exports in 1987) included newsprint and other products which are not included in the diagram. The United States, Asia and Europe were important markets for iron ore, fish and newsprint in 1987. Although most exports to Asia in 1987 were destined to Japan, exports to other Asian markets included shipments of newsprint to China and shipments of non-metallic minerals to India. The ties between the economy of Newfoundland and Labrador and foreign economies through our exports has caused the economic performance of the Province to rise and fall in unison with that of foreign economies.

Diagram II.1



SOURCE: STATISTICS CANADA AND GOVERNMENT OF NEWFOUNDLAND & LABRADOR

Approximately 51 percent of the output of the goods producing sector is accounted for by the agriculture, construction, and electric power and water utilities industries as well as the non-resource manufacturing component of the manufacturing industry. The output of these industries is primarily for consumption within the Province. The construction industry meets the housing and capital infrastructure requirements of the economy. The electric power and water utilities provide electricity

and water supplies. Goods such as beverages, foodstuffs, shipbuilding and concrete are provided by the non-resource manufacturing industries. Agriculture is not large in Newfoundland and Labrador but the food it produces is largely for consumption within the Province.

The proportion of GDP accounted for by the service sector in 1987 averaged approximately 60.8 percent for the 10 Canadian provinces, according to the Conference Board of Canada. The proportion varied across provinces, from a low of 52.5 percent in Alberta to a high of 68.9 percent in Prince Edward Island. In Newfoundland and Labrador, the proportion of GDP in the service sector fell about midway between the lowest and the highest. The distribution of monthly average employment, which consists of both full-year and part-year employment, within the service sector of the Province and of Canada is also similar, as illustrated in the table below.

An examination of the industries which comprise the service sector and some examples of the services and products provided by the firms within these industries are useful in understanding this essential component of the economy.

Table II.3 reveals that the types of services offered by the Transportation, Communication and Other Utilities industry include transportation by air, road, water and rail (railway transportation is provided only in Labrador since the closure of the Island railway in 1988). This industry is dominated by the transportation component and in 1988 it was estimated that approximately 16,000 persons were employed in this industry on a monthly average basis; some of this employment would have been part-year. The size of the workforce in this industry is not surprising given the number of workers required to handle the large volume of goods that move to, from and within the Province by truck, rail and ship. In addition, many workers are required to facilitate the movement of people by air and land transport in a modern economy.

TABLE II.2

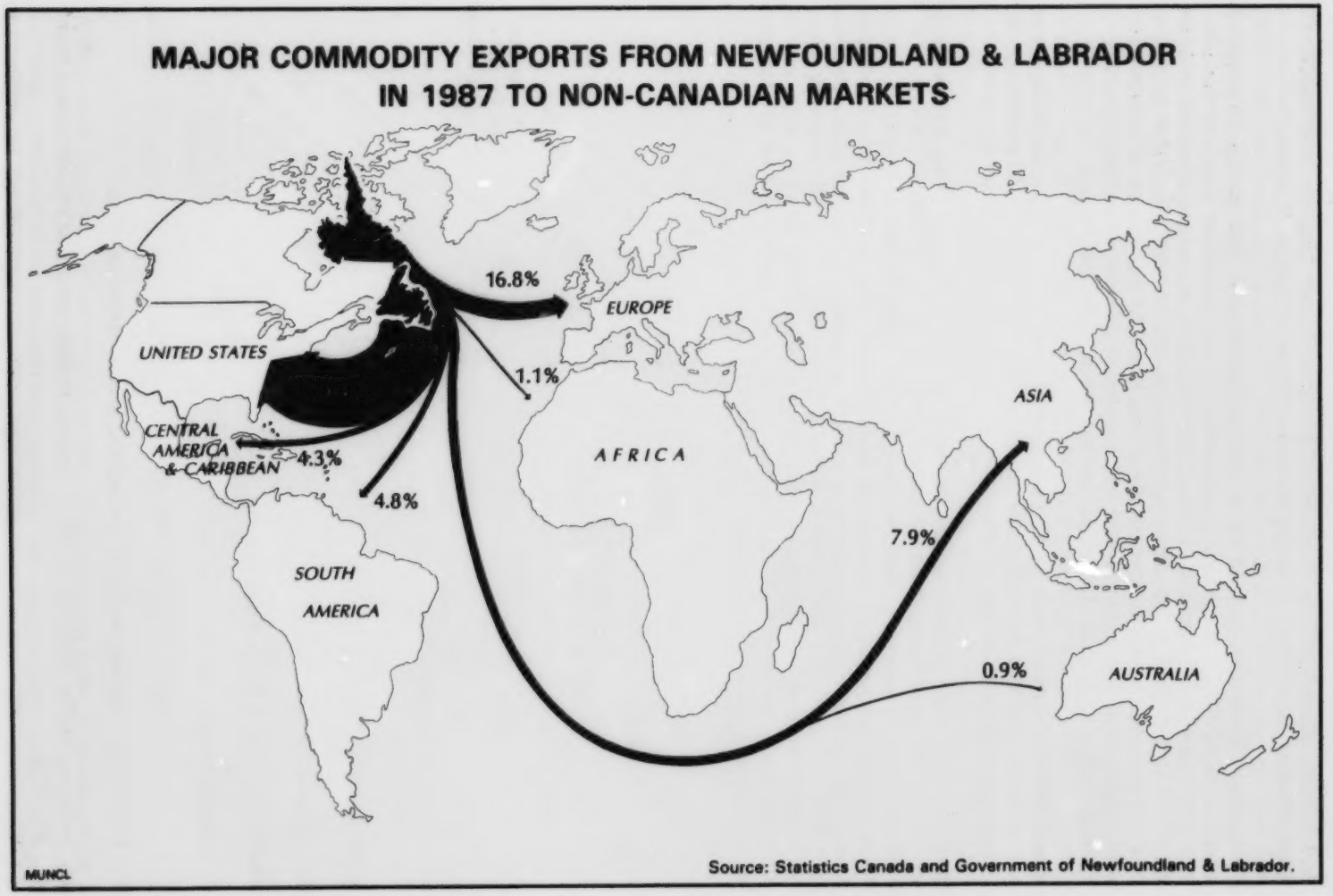
DISTRIBUTION OF EMPLOYMENT BY SERVICE SECTOR INDUSTRY IN 1988

	Canada Percent of Total	Newfoundland and Labrador Percent of Total
Transportation, Communication & Other Utilities	10.6	11.8
Wholesale & Retail Trade	25.4	26.5
Finance, Insurance & Real Estate	8.5	4.4
Community, Business & Personal Services	47.5	46.3
Public Administration	9.5	13.2

Note: Components may not add to 100 percent due to independent rounding.

Source: Statistics Canada catalogue 71-529; Economic Research and Analysis Division, Cabinet Secretariat.

Map II.1


MAJOR COMMODITY EXPORTS FROM NEWFOUNDLAND & LABRADOR
IN 1987 TO NON-CANADIAN MARKETS
16.8%
EUROPE
UNITED STATES
1.1%
ASIA
CENTRAL
AMERICA
& CARIBBEAN
4.3%
AFRICA
4.8%
7.9%
SOUTH
AMERICA
0.9%
AUSTRALIA
MUNCL
Source: Statistics Canada and Government of Newfoundland & Labrador.

The Wholesale and Retail Trade industry is the second largest component of the service sector in terms of employment. Firms within this industry provide consumer goods, food, clothing and many other products essential in Newfoundland and Labrador.

The performance of both the Transportation, Communication and Other Utilities industry and the Wholesale and Retail Trade industry are closely related to the level of economic activity in the goods producing sector. For example, an increase in fish landings will cause an increase in the number of persons required to process and ship the product. Furthermore, additional supplies will be required by fishermen, processors and transport companies to support the increased level of activity. This increased demand for services by the goods sector, along with the additional income generated in both sectors, will stimulate an increase in the output of the Transportation, Communication and Other Utilities and the Wholesale and Retail Trade industries. These elements of the service sector tend to move in harmony with the goods producing sector.

Examples of the types of services provided by the Community, Business and Personal Services and Public Administration industries are also provided in Table II.3. Increases in the output of these industries are less directly related to the performance of the goods producing sector. For example, the number of teachers and doctors employed by institutions within the Community, Business and Personal Service industry, or the number of police officers employed by agencies within Public Administration will not vary substantially from one year to the next since these services are required on an ongoing basis and are primarily related to demographic and social factors.

TABLE II.3

SERVICE SECTOR INDUSTRIES AND THE SERVICES AND PRODUCTS PRODUCED

Industry Division	Illustrative Types of Services	1988 Annual Average Employment
Transportation, Communication & Other Utilities	Air, Railway (Labrador only), Road & Water Transportation, Broadcasting, Telephone, Electric Power	16,000
Wholesale & Retail Trade	Selling of Consumer Goods, Products, Food, Clothing, Appliances, Building Supplies, Automobiles, etc.	36,000
Finance, Insurance & Real Estate	Banking, Insurance & Real Estate Services	6,000
Community, Business & Personal Services	Lawyers, Accountants, Teachers, Doctors, Nurses, Social Workers, Hospital Workers	63,000
Public Administration	Municipal, Provincial & Federal Levels of Government	18,000

Source: Standard Industrial Classification (1980); Statistics Canada catalogue 71-529.

This overview of the structure of the Newfoundland and Labrador economy provides a context within which changes in performance from year to year can be assessed. An understanding of the current structure of the Provincial economy provides a useful framework for reviewing the performance of the economy in 1988 and the outlook for 1989.

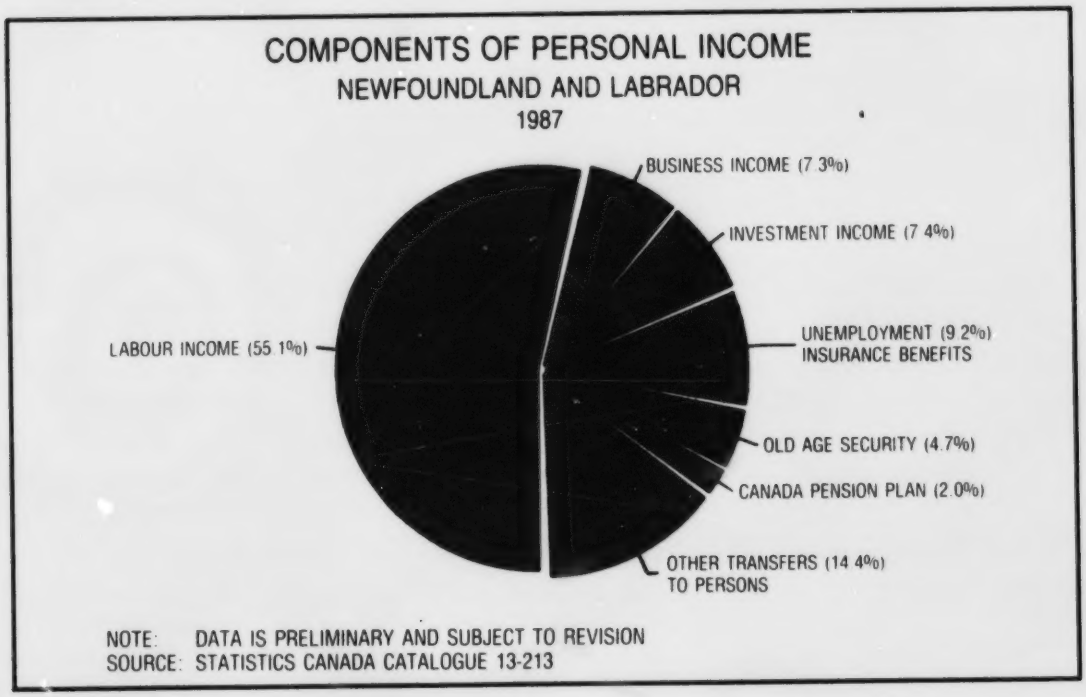
III. OVERVIEW OF ECONOMIC CONDITIONS

Newfoundland and Labrador experienced real economic growth in 1988 as increases in both domestic and foreign demand for the Province's goods and services buoyed economic activity. Real Gross Domestic Product (GDP) increased by 3.8 percent in 1988. Export industries benefited from strong growth abroad, particularly in the United States and Japan, the Province's two largest trading partners. Growth in domestic demand was largely related to higher consumer spending as rising personal income combined with a low rate of inflation to enhance consumers' purchasing power.

Economic growth in the Province's goods and service producing industries led to an increase in both full-year and seasonal employment amounting to about 10,000 person-years in 1988, up by 5.5 percent over 1987. The increase in employment exceeded labour force growth by 2,000 person years and resulted in a decline in the monthly average unemployment rate to 16.4 percent, a decrease of 1.5 percentage points from 1987. Increased employment, in combination with a 4.8 percent rise in average weekly earnings, resulted in higher wages and salaries which contributed to growth of 9.0 percent (6.5 percent in real terms) in personal income. Labour income grew by 7.2 percent in 1988. Total wages and salaries in the goods producing and service producing sectors grew by 10.6 and 6.6 percent respectively. Growth in Unemployment Insurance benefits also contributed to the increase in personal income in 1988. Unemployment Insurance benefits, the largest component of transfers to persons, increased by 15.4 percent to $751.8 million in 1988. This large increase is related to the growth of seasonal employment last year that meant more people were eligible for Unemployment Insurance. Higher insurable earnings, due to an increase in average weekly earnings, also contributed to the increase in Unemployment Insurance benefits.

Earned income (personal income excluding transfers to persons) accounts for about 70 percent of personal income; this and other components of personal income in 1987, and the share that each comprised, is outlined in Diagram III.1.

Diagram III.1



Increased personal income combined with increased tourism activity boosted consumer spending in 1988. The value of retail trade increased by 11.1 percent (8.6 percent in real terms) in the first 11 months of 1988 compared to the same period in 1987. The sources of growth in retail sales by type of business are indicated in Table III.1. The growth was broadly based with only clothing stores experiencing a decline in sales. Sales of food and sundries and motor vehicles were the largest contributors to the overall growth in retail trade. The number of new motor vehicles sold during the year increased by 3.9 percent to 28,336 units, the highest level ever.

Restaurants, take-outs, caterers and taverns all benefited from increased consumer expenditures during the year. Total receipts were $162.9 million, an increase of 12.3 percent over 1987. Growth in the receipts of licenced restaurants, take-outs and taverns was strongest, while those of unlicenced restaurants and caterers recorded modest increases. The overall increases in personal consumption expenditures in 1988 contributed to the increased activity in Trade (Retail and Wholesale) and Services (Community, Business and Personal) industries during the year.

TABLE III.1

VALUE OF RETAIL TRADE BY TYPE OF BUSINESS
NEWFOUNDLAND AND LABRADOR
($ thousands)

Type of Business	Jan. - Nov., 1987	Jan. - Nov., 1988	Growth Rate(%)
Food & Sundries Stores	661,841	758,144	14.6
Department Stores	125,713	132,035	5.0
General & Variety Stores	264,457	277,790	5.0
Motor Vehicle Dealers	482,974	540,802	12.0
Service Stations & Automotive Related Stores	347,520	380,808	9.6
Clothing Stores	117,197	115,771	-1.2
Hardware & Household Accessories Stores	73,887	87,745	18.8
Drugstores	142,775	169,099	18.4
Sporting Goods & Accessories Stores	14,141	17,721	25.3
All Other Stores	224,644	248,937	10.8
Total All Stores	**2,455,149**	**2,728,852**	**11.1**

Note: Values for 1988 are preliminary. The data by type of business is aggregated from more detailed data contained in the source referenced below. The definitions of business types may therefore differ from those reported in the source.

Source: Statistics Canada catalogue 63-005.

The level of investment activity contributed to a positive economic environment in the Province in 1988. Total investment increased by 3.3 percent to $2,537 million in 1988 according to a survey

of investment intentions carried out by Statistics Canada last year. The survey was conducted around mid-1988 and reflects the spending intentions of business, government and individuals at that time. Increases in both capital and repair investment in machinery and equipment of 17.5 percent were more than sufficient to offset the 4.6 percent decrease in total construction expenditures, as indicated in Table III.2. It is expected that actual investment figures for 1988 will be higher than the initial estimates indicated by this survey due to the larger than expected increase in residential construction activity and the optimism surrounding the start of development work pertaining to the Hibernia project in 1989.

TABLE III.2

INTENDED INVESTMENT EXPENDITURES
NEWFOUNDLAND AND LABRADOR, 1988
($ millions)

Expenditures	Construction	Machinery & Equipment	Total
Capital Expenditures	**1,281.5** (-6.3%)	**675.8** (24.7%)	**1,957.3** (2.5%)
Primary Industries and Construction Industry	285.2 (-22.2%)	86.2 (17.3%)	371.4 (-15.6%)
Food and Beverage Manufacturing	13.0 (-22.6%)	45.2 (11.1%)	58.2 (1.2%)
Other Manufacturing	22.3 (-32.4%)	122.5 (49.0%)	144.8 (25.7%)
Transportation, Communication and Other Utilities	97.1 (29.6%)	233.4 (68.8%)	330.5 (55.0%)
Trade, Finance and Commercial Services	92.6 (-21.7%)	127.1 (-4.7%)	219.7 (-12.7%)
Institutions and Government Departments	321.6 (7.6%)	61.4 (-17.1%)	383.0 (2.7%)
Housing	449.7 (-2.2%)	n.a.	449.7 (-2.2%)
Repair Expenditures	**222.0** (7.0%)	**358.1** (6.0%)	**580.1** (6.4%)
Total Capital and Repair Expenditure	**1,503.5** (-4.6%)	**1,033.9** (17.5%)	**2,537.4** (3.3%)

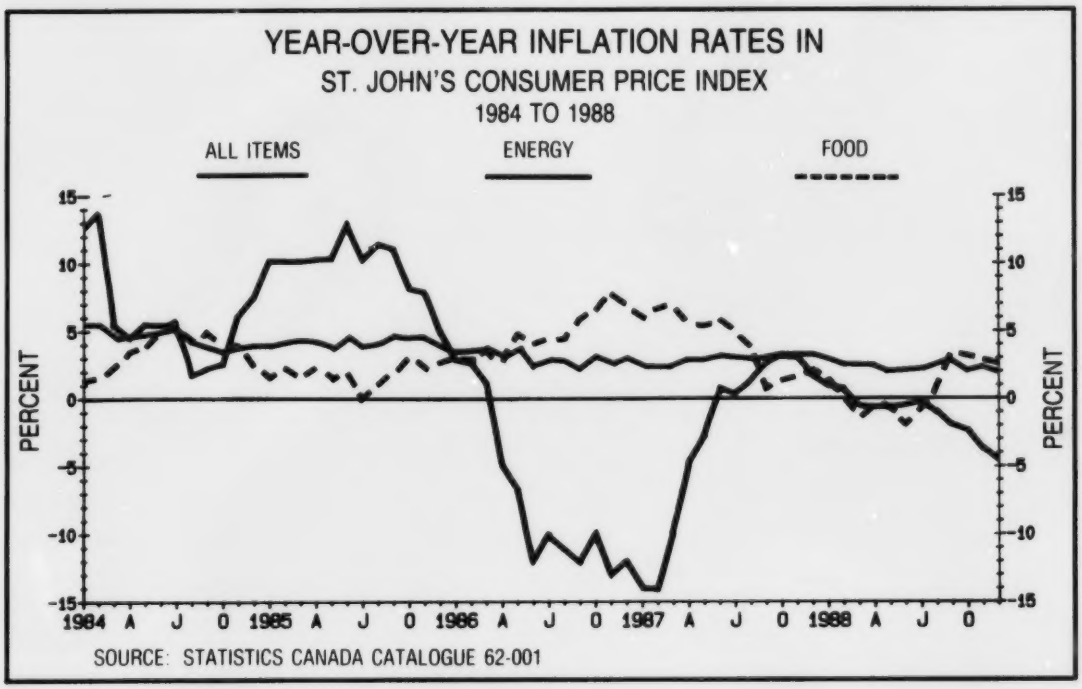
Notes: Figures in parentheses refer to change from 1987. Figures for 1987 are preliminary actual while those for 1988 are revised intentions.

n.a.: Not applicable

Source: Statistics Canada catalogue 61-205; Economic Research and Analysis Division, Cabinet Secretariat.

The rate of inflation in the Province, as measured by the St. John's Consumer Price Index, was 2.4 percent in 1988, down from the 2.9 percent registered in 1987. This rate was much lower than the national inflation rate of 4.1 percent and last year was the third consecutive year that inflation in the Province was below the national level. This low inflation rate was largely the result of lower prices for energy and only small increases in transportation and food prices compared to 1987. Excluding the two most variable components, food and energy, the Consumer Price Index advanced by 3.3 percent in 1988. The groups within the index which recorded the largest price increases were alcoholic beverages; recreation, reading and education; and health care. By contrast, the public transportation component recorded the largest price decrease.

Diagram III.2



The outlook for the Provincial economy in 1989 is positive as real GDP is expected to grow by 2.8 percent. The market environment for most of the Province's traditional commodity exports such as fish products and iron ore will be favourable as continued growth in the international economy is expected. This should be sufficient to counteract the negative impact stemming from the recent appreciation of the Canadian dollar against other key currencies. The fishing industry is expected to experience a decrease in output in 1989 due to reductions in quotas but the impact could be cushioned, though not offset, by higher prices for some fish species. The mining industry is expected to benefit from higher prices and increased output of most mineral products. Recent capacity expansion in the newsprint industry and recovery of production foregone as a result of the strike at Corner Brook during 1988 is expected to provide some growth in 1989. Preparations for the Hibernia development, as well as the commencement of actual construction, could also provide a strong stimulus to economic activity, especially in the construction industry.

Service producing industries are expected to benefit from increased activity in the goods producing sector and increased spending by consumers. Growth in the public sector, however, is expected to be restrained at both levels of Government by sizeable current account deficits. Increased tourism activity is expected and this would favour many firms in the Services and Trade industries.

Because of the expected growth in both the goods and service producing sectors in 1989, employment is expected to grow by 4,000 person years consisting of both full-year and seasonal workers. The Province's labour force is expected to expand less rapidly and, as a result, the unemployment rate is expected to fall to 15.7 percent. Increased employment, coupled with higher average earnings per employee, is expected to spur labour income growth and, as a result, personal income is expected to grow by 7.0 percent during the year. Increased personal income would stimulate consumer spending and retail trade is expected to grow by approximately 7.0 percent in 1989. Higher interest rates, as well as higher taxes introduced by the recent Federal Budget, are expected to contribute to slower growth in consumer spending than in 1988. Growth in investment of about 8.1 percent will be driven primarily by development work on the Hibernia project as business expectations are expected to remain positive. Inflation is expected to advance by 3.1 percent during 1989, the highest rate since 1985, mainly as a result of an expected increase in inflation at the national level.

IV. AGRICULTURE

The agriculture industry accounts for less than one percent of Gross Domestic Product (GDP) in the goods producing sector and less than one half of one percent of total GDP. The industry, however, is important to rural areas of the Province and it reduces the Province's overall dependence on certain imported foods. The output of this industry is mainly consumed domestically although some agricultural products, such as blueberries and furs, are exported to markets outside the Province. Activities in the primary agriculture industry include the production of vegetables and other crops, as well as livestock and livestock products such as eggs and milk, while secondary activities include the production of products such as homogenized milk, processed meat products and ice cream. Primary and secondary agriculture together employ approximately 1,600 persons on a monthly average basis. Much of the primary employment is seasonal in nature.

Table IV.1

FARM CASH RECEIPTS, 1987 & 1988
NEWFOUNDLAND AND LABRADOR,
($ thousands)

Livestock & Products	1987	1988	% Change
Cattle & Calves	1,197	1,472	23.0
Hogs	3,845	3,309	-13.9
Sheep & Lambs	191	177	-7.3
Dairy Products	15,721	15,910	1.2
Poultry	13,037	14,189	8.8
Eggs	8,724	9,270	6.3
Other Livestock & Products	1,203	948	-21.2
Total Livestock & Products	**43,918**	**45,275**	**3.1**
Crops Produced			
Potatoes	1,069	1,050	-1.8
Other Vegetables	2,202	2,286	3.8
Fruit	1,118	1,080	-3.4
Floriculture, Nursery & Other	2,611	2,732	4.6
Crop Insurance Payments	42	10	-76.2
Total Crops	**7,042**	**7,158**	**1.6**
Other Receipts & Supplementary Payments	1,754	2,170	23.7
TOTAL CASH RECEIPTS	**52,714**	**54,603**	**3.6**

Source: Policy Branch, Agriculture Canada.

Farm cash receipts are divided into two main categories; livestock and related products, which traditionally account for the largest proportion of farm cash receipts; and crops, as outlined in

Table IV.1. About 83 percent of total cash receipts in 1988 were generated by livestock and livestock products while approximately 13 percent were accounted for by crops. The remaining four percent was derived primarily from sources such as the sale of forest and maple products and from payments under the Provincial income stabilization program. Total farm cash receipts increased by 3.6 percent to $54.6 million in 1988 due primarily to increases in the livestock and related products sector.

Receipts from livestock and livestock products increased by 3.1 percent in 1988 compared to 1987 and accounted for over 70 percent of the improvement in total farm cash receipts. Dairy products, poultry and eggs accounted for the largest proportion of livestock and related product receipts and increases in sales of these commodities, as well as cattle, were more than sufficient to offset decreases in sales of other products. Dairy product receipts increased by 1.2 percent as approximately 80 registered dairy producers sold milk, the main product of the dairy industry, to two Provincial dairies during the year; production by these two dairies accounted for almost 85 percent of the fluid milk consumed in the Province. Poultry receipts of the 19 broiler producers in the Province rose by 8.8 percent compared to 1987 while the value of egg sales by the 36 Provincial egg producers increased by 6.3 percent. Hog receipts of the 16 Provincial hog producers declined 13.9 percent in 1988 as a result of a 20 percent decline in average farm gate prices to the farmers. Hog prices tend to vary substantially and this, as opposed to the level of production, is usually the major source of fluctuation in hog producers' revenues.

Total crop receipts rose by 1.6 percent during 1988. The largest proportion of crop receipts were derived from floriculture, nursery and other products, and vegetables other than potatoes; increases in sales of these commodities accounted for the increase in total crop receipts. Receipts from floriculture, nursery and other products increased by 4.6 percent during the year. Major floriculture and nursery products such as bedding plants, potted plants, vegetable transplants and fresh lettuces, are produced for sale within the Province in greenhouses and other enclosed production facilities. Other products in this category include field crops such as savory which are sold both in local and export markets. Receipts for vegetables, mainly turnip and cabbage, increased by 3.8 percent in 1988. Other field crops produced in the Province include potatoes and fruit such as strawberries and blueberries. Potato receipts declined by 1.8 percent in 1988 due to a lower marketable yield and fruit receipts decreased by 3.4 percent. Farm cash receipts do not fully reflect the importance of fruit production in the Province as they account for the value of cultivated products but exclude the harvest of blueberries and other small fruits not grown on farms.

Farm net income, the difference between revenues and expenses, is a good indicator of Provincial farmers' income. Preliminary estimates indicate that realized net farm income for 1988 decreased by 10.0 percent to $12.2 million. This decrease was primarily attributable to an eight percent increase in farm operating expenses; feed expense, the major component of farm operating expenses, rose by 13.7 percent to $19.9 million.

Efforts to enhance the agriculture industry in the Province in recent years have been supported by both the Federal and Provincial governments and two agreements are now in place to help develop the industry. The five year Canada-Newfoundland Agri-Food Development Subsidiary Agreement, signed in June 1988, committed $8 million to promote the growth of a viable agri-food industry in the Province through increases in productive efficiency and enhanced marketing programs. The Canada-Newfoundland Subsidiary Agreement on a Livestock Feed Initiative, signed in March 1987, committed $4.8 million over a four year period to develop the Newfoundland livestock feed sector by increasing the quantity and quality of livestock feed produced in the Province. Significant progress has been made in improving forage self-sufficiency, contributing to overall improvements in quality as well as quantity. This will significantly improve farmers net income by reducing the feed cost component of their operating expenses in future years.

The outlook for the agriculture industry in 1989 is positive as total farm cash receipts are expected to increase by eight percent to about $59 million. This expected increase is primarily attributable to rising livestock and livestock products receipts which are forecast to grow by approximately nine percent. Increases in livestock and livestock products receipts are expected to

result from several factors; an anticipated recovery in hog and fur prices, moderate growth in the fluid milk sector, higher prices and marginal production increases for poultry, and improved egg prices. Crop receipts are expected to increase by about four percent due to an anticipated rise in potato production and prices.

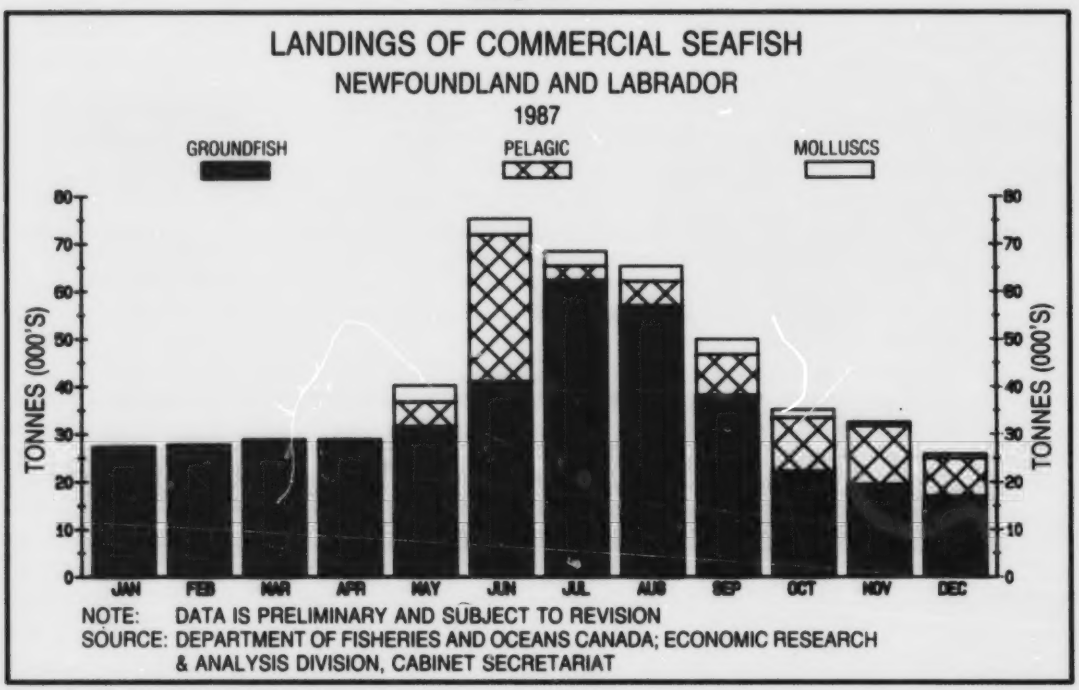
V. FISHERY

The fishing industry accounted for approximately 22 percent of Gross Domestic Product (GDP) in the goods producing sector in 1987 and about 8 percent of total GDP. The fishing industry includes primary activities involving the harvesting of fish and the secondary processing of fish products. The fishing industry is the largest goods producing employer in Newfoundland and Labrador providing about 22,000 person years of employment in 1988. Much of the employment in this industry is part-year, or seasonal, in nature.

Approximately 12,000 person years of employment are accounted for by primary fishing activities and about 10,000 are accounted for by secondary fish processing. Since much of the employment in this industry is seasonal, estimates in person years understate the number of people who are employed in this industry at some time during the year. For example, approximately 15,000 part-time and nearly 14,000 full-time fishermen were registered throughout Newfoundland and Labrador based on estimates available for 1987; this compares with only 12,000 person years of employment in 1988. The reliance on the fishing industry as a seasonal employment generator, particularly for the rural labour force, is also demonstrated by the fact that during 1986, approximately 26,000 people were listed on the payrolls of 201 fish processing firms located throughout the Province; this compares with 10,000 person years of employment in 1988. In all, this amounts to about 55,000 people who depend directly on the fishing industry for employment for some part of the year.

The number of workers and the volume of landings in the fishing industry typically peak during the summer months due to the seasonal operations of some sectors of the fishing industry. Diagram V.1 shows that pelagic landings, which have been comprised mainly of capelin and herring in recent years, normally peak in June when capelin migrate shoreward and are harvested by inshore/near-shore vessels. Groundfish landings, comprised mainly of cod, also peak during the summer months as cod migrate shoreward and the Province's largest inshore sector, based along the Northeast coast of the Island, is in full operation. As a result, the length of employment for many people involved in fish processing activities is linked to the seasonal harvesting patterns of the fishing industry and this accounts for the fact that employment estimates in person years substantially underestimate the actual number of people who depend on the fishery.

Diagram V.1



The Province's primary fishing sector turned in a positive performance during 1988 as indicated by a rise in the total volume and value of fish landings. The quantity of fish harvested during the first eleven months rose by nine percent while landed value advanced by 5.4 percent as outlined in Table V.1. Increases in the total volume of fish landed resulted from larger harvests of cod, pelagics (primarily capelin), and molluscs and crustaceans (lobster, crab, shrimp and scallops). Increased landings of these species were more than sufficient to offset declines in other mainstays such as redfish, flatfish, and turbot. The total value of fish landings did not increase as much as volume due mainly to lower prices paid to fishermen for cod and some other species of groundfish.

TABLE V.1

REPORT OF LANDINGS AND LANDED VALUES OF COMMERCIAL SEAFISH NEWFOUNDLAND AND LABRADOR, JANUARY - NOVEMBER 1987 AND 1988 (metric tonnes - round weight & value - $ thousands)

Species	Quantity Landed To Date		Value of Landings To Date	
	1987	1988	1987	1988
Cod	271,084	278,114 (2.6%)	164,392	146,083 (-11.1%)
Total Groundfish	**375,906**	**362,739 (-3.5%)**	**206,995**	**177,463 (-14.3%)**
Capelin	29,607	91,740 (209.9%)	7,014	29,850 (325.6%)
Total Pelagic & Other Fin Fish	**74,305**	**120,142 (61.7%)**	**19,282**	**38,746 (100.9%)**
Total Molluscs & Crustaceans	**20,723**	**30,234 (45.9%)**	**41,605**	**66,071 (58.8%)**
GRAND TOTAL	**470,934**	**513,115 (9.0%)**	**267,882**	**282,280 (5.4%)**

Notes: Estimates of Provincial fish landings include the Gulf Region (West Coast of the Province) and the remaining portion of the Island and Labrador known as the Newfoundland Region. In addition to the above, landed value to fishermen for lumpfish roe production during the period January to November 1987 and 1988 was approximately $13.7 million and $4.1 million respectively.

All figures are preliminary and subject to revision. Estimates based on data available as of February 24, 1989.

Source: Department of Fisheries and Oceans, Moncton, New Brunswick and St. John's, Newfoundland; Economic Research and Analysis Division, Cabinet Secretariat.

Cod is the most important species landed in the Province and, as outlined in Table V.2, cod catches varied considerably by fleet sector. Higher cod landings were reported by the offshore trawler fleet, the inshore/nearshore fleet based in the North Atlantic Fisheries Organization (NAFO) division 2J+3KL (see Map V.1), and by participants in the Resource Short Plant Program which combined, served to offset decreases reported by the inshore/nearshore fleet based in NAFO divisions 3PS, 3PN and 4R.

TABLE V.2

COD LANDINGS BY MAJOR FLEET SECTORS
NEWFOUNDLAND AND LABRADOR
(metric tonnes - round weight)

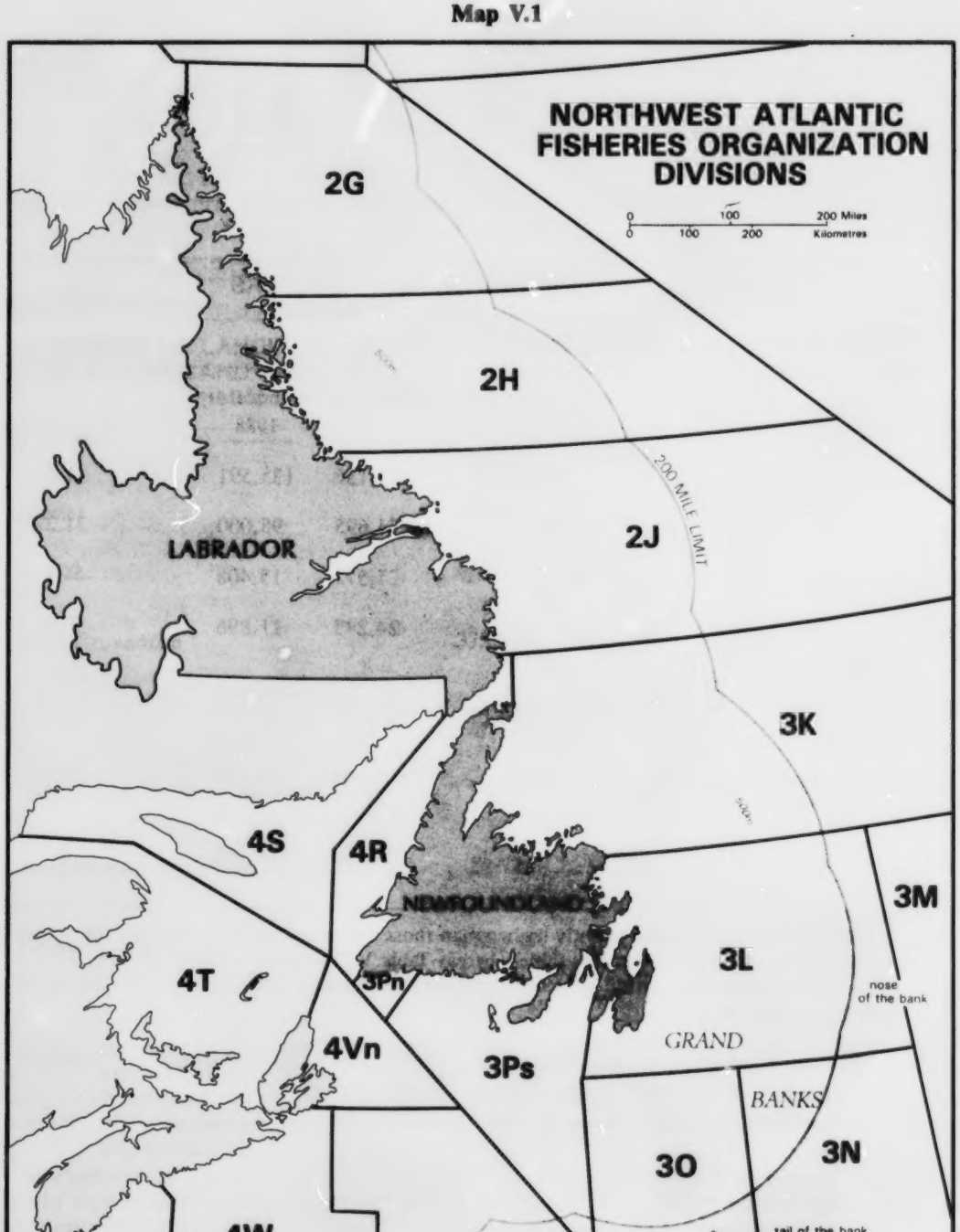
Fleet Sector	NAFO Area	Quantity Landed 1987	Quantity Landed 1988	% Change
Offshore	All areas	122,136	135,591	11.0
Inshore/Nearshore	2J+3KL	74,695	98,000	31.2
Inshore/Nearshore	3PS	27,571	15,408	-44.1
Inshore/Nearshore Fixed Gear	4R+3PN	24,249	11,896	-50.9
Inshore/Nearshore Mobile Gear	4R+3PN	24,161	17,151	-29.0
Vessels under the Resource Short Plant Program	2J+3KL	6,894	12,105	75.6
Total		**279,706**	**290,151**	**3.7**

Note: Estimates in this table are slightly higher than those contained in Table V.1 because annual estimates were available for this table whereas Table V.1 contains comparative data for the January - November period of 1987 and 1988. Estimates based on data available as of February 24, 1989.

Source: Department of Fisheries and Oceans, St. John's; Provincial Department of Fisheries; Economic Research and Analysis Division, Cabinet Secretariat.

Most fish landed in the Province are manufactured into a wide variety of products in fish plants distributed around the coast of the Province. The greatest concentration of fish plants is found on the northeast coast of the Island and in southern parts of Labrador. Major products of the fish processing industry are fresh or frozen fish, frozen fillet and block, salted fish, shellfish meat and fish meal. Fillet and block products remain the most important commodity generally accounting for in the neighbourhood of 70 percent of the total value of fish production in the Newfoundland Region. The fillet and block production mix is determined in the short term by a combination of factors including the availability of quality raw material, contractual agreements between processors and buyers, and the relative prices of groundfish products in the Province's main markets.

Map V.1


NORTHWEST ATLANTIC
FISHERIES ORGANIZATION
DIVISIONS
0 100 200 Miles
0 100 200 Kilometres
2G
2H
2J
3K
3L
3M
3N
3O
3Ps
3Pn
4R
4S
4T
4Vn
4W
4X
4Vs
LABRADOR
NEWFOUNDLAND
200 MILE LIMIT
500m
GRAND
BANKS
nose
of the bank
tail of the bank

Preliminary production estimates for 1988 indicate that the quantity of frozen groundfish products manufactured in the Newfoundland Region reached 97,645 tonnes, up by nearly two percent from the previous year. Total fillet production dropped by approximately 9.4 percent to 50,122 tonnes while total block production rose by 13 percent to 36,713 tonnes. The production of other groundfish products rose by about 36 percent to 10,811 tonnes during 1988. Total fillet production declined due to reduced production of haddock, redfish, flatfish and turbot; cod fillet production remained relatively steady for the year at 30,850 tonnes. Total block production rose during 1988 due to a large increase in the production of cod block. Cod block production increased by more than 18 percent to 33,094 tonnes while the production of other types of block products declined by 20 percent. More cod block, relative to cod fillet, was produced during 1988. This was partly because of favourable prices paid for cod block compared to cod fillet in New England, the Province's main market.

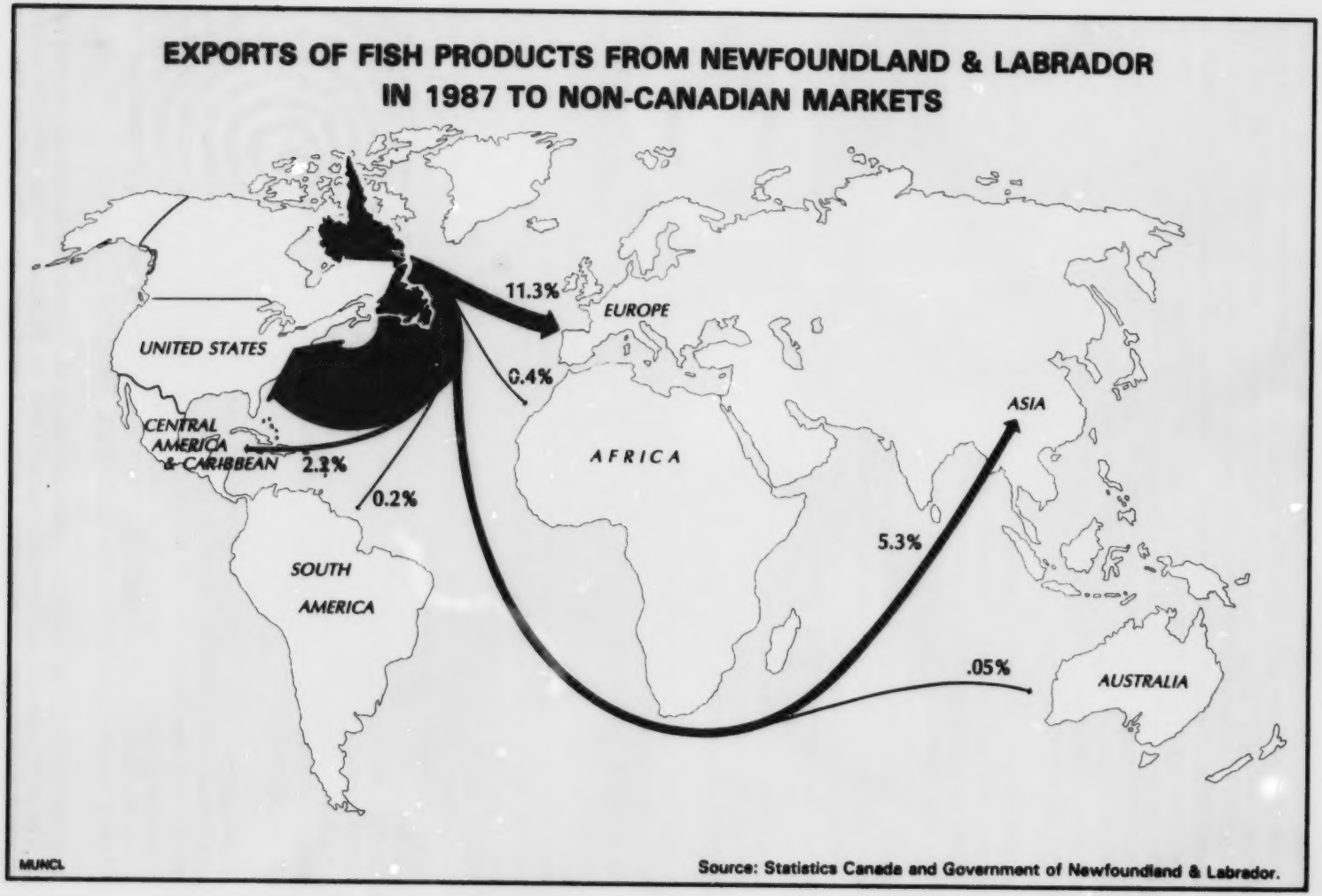
The two largest vertically integrated fish companies in the Province, Fishery Products International Limited (FPI) and National Sea Products Limited (NSP) reported lower profits during 1988 compared to the previous year mainly as a result of lower fish prices and unfavourable exchange rates. FPI reported sales of $279.6 million for the first nine months of 1988 compared to $306.5 million for the same period of 1987. Income before extraordinary items was $8.3 million, approximately one-third of $24.9 million reported in the same period during 1987. FPI continues to make inroads into new markets throughout the world thus decreasing its reliance on the United States which is the company's largest market. This was evidenced by the introduction of new seafood products into the Japanese market during 1988. NSP reported sales of $419.3 million during the first nine months of 1988 compared to $418.9 million in 1987. Income before extraordinary items was $2.0 million, less than nine percent of the $22.8 million reported in the same period of the previous year. Decreased earnings reported by NSP were, in addition to unfavourable market circumstances, related to an 11.6 percent decrease in the Company's fleet landings.

The production of salted cod for export increased during 1988 by approximately 41 percent from the previous year to 16,200 tonnes. Approximately 90 percent of production was of the heavy salted variety while the remainer was lightly salted. The production of salt cod has risen in recent years due to efforts by the Canadian Saltfish Corporation (CSC) to increase market penetration and sales. To this end, the CSC has contracted processors who previously did not produce saltfish to diversify their operations and manufacture saltfish products for export. The strongest growth in saltfish production was attributed to these non-traditional suppliers of salted fish. The amount of saltfish produced by this component of the saltfish industry rose by 60 percent in 1988 to about 5,600 tonnes. Traditional suppliers produced approximately 10,600 tonnes, an increase of about 32.5 percent from the previous year. Saltfish produced in the Province is exported through marketing and distribution channels of the CSC. The main markets for saltfish produced in the Province are Puerto Rico and Portugal. Lower prices for frozen cod products in the United States groundfish market during 1988 resulted in increased supplies of saltfish in international markets as Iceland and Norway (the strongest competitors in the saltfish market) diverted a larger proportion of cod into saltfish production compared to previous years. In spite of the fact that the CSC was able to export more saltfish, it is not expecting a profitable year due to the strong competitive environment which prevailed throughout 1988.

The price received for frozen female capelin rose sharply during 1988. Market demand was strong and traditional suppliers such as Norway and Iceland were unable to meet market requirements. It is estimated that the production of female capelin, primarily for the Japanese market, more than doubled, rising to about 35,000 tonnes during 1988. Prices received for female capelin rose by 40-50 percent to approximately US $1,650 per tonne. Overall, participants in the capelin fishery reported a very successful year during 1988.

The majority of all fish products manufactured in the Province are exported to international markets. The total value of all seafood exported from the Province during 1987, the most recent year for which data is available, was $606.5 million. Preliminary estimates indicate that the total

Map V.2


EXPORTS OF FISH PRODUCTS FROM NEWFOUNDLAND & LABRADOR
IN 1987 TO NON-CANADIAN MARKETS
11.3%
EUROPE
UNITED STATES
0.4%
ASIA
CENTRAL
AMERICA
& CARIBBEAN
2.3%
AFRICA
0.2%
5.3%
SOUTH
AMERICA
.05%
AUSTRALIA
MUNCL
Source: Statistics Canada and Government of Newfoundland & Labrador.

value of seafood exports shipped from the Province during 1988 decreased from the previous year due to lower fish prices and a stronger Canadian dollar.

The main destinations of the Province's fish products are illustrated in Map V.2. Since about 80 percent of the Province's seafood exports are shipped to the United States, the performance of the fishing industry, in the absence of supply side constraints, depends largely on conditions in the American seafood market. Seafood exports to the United States are comprised mainly of groundfish products, particularly cod fillet and block. Groundfish products are sold to American consumers either through the food-service or the retail segments of the seafood market. The largest user of seafood in general is the food-service segment which accounts for approximately 64 percent of all seafood consumed in the United States. The food-service segment encompasses major franchised food operations such as Long John Silver's and MacDonald's.

The United States seafood market weakened considerably during 1988 as consumption of cod fillet and block fell below levels recorded in 1987. Cod fillet consumption declined by approximately 8.8 percent and cod block consumption decreased by about 12.9 percent during the first eleven months of 1988 compared to the same period in the previous year; this had a dampening effect on prices.

Most of the Province's fish exports to the United States enter the seafood market through the New England area where some fish products, such as cod block, are further processed into other products such as breaded and battered fish sticks, fish burgers and portions. Changes in the amount of groundfish which processing plants have available is reflected in New England cold storage holdings. Inventories of cod fillet and block were higher throughout 1988 and at year-end were 35.9 percent and 79.5 percent higher, respectively, than a year earlier, as outlined in Table V.3. Seafood market analysts are of the opinion that traditional suppliers of cod (Canada, Iceland and Norway) will experience a drop in landings during 1989 and this will facilitate a reduction in fish inventories.

TABLE V.3

NEW ENGLAND COLD STORAGE HOLDINGS
END OF YEAR GROUNDFISH STOCKS
(metric tonnes - product weight)

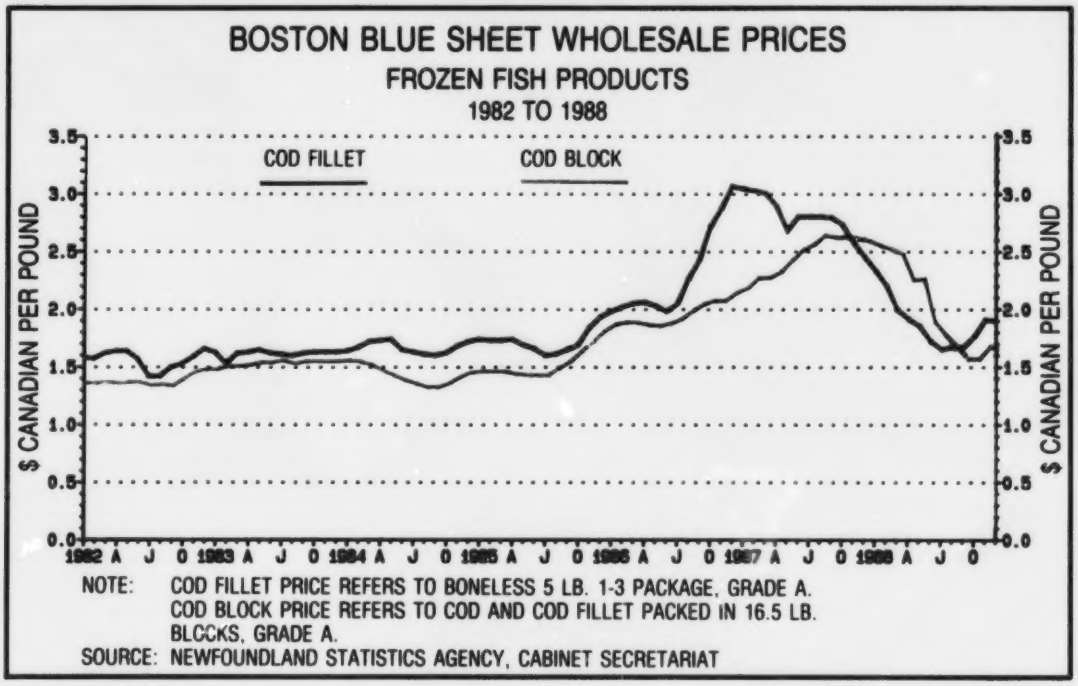
	December			% Change	% Change
	1986	1987	1988	Dec. 1987/86	Dec. 1988/87
Cod Fillet	4,559	5,466	7,426	19.9	35.9
Other Fillet	10,556	11,676	11,561	10.6	-1.0
Total Fillet	**15,116**	**17,142**	**18,987**	**13.4**	**10.8**
Cod Block	6,737	6,950	12,477	3.2	79.5
Other Block	6,687	11,666	10,326	74.5	-11.5
Total Block	**13,425**	**18,616**	**22,803**	**38.7**	**22.5**

Note: Totals may not add due to rounding.

Source: United States Department of Commerce; Economic Research and Analysis Division, Cabinet Secretariat.

High inventories and falling consumption resulted in declining prices for cod fillet and block throughout most of 1988 and prices were lower on average compared to 1987 despite some improvement late in the year. Wholesale cod fillet prices, as measured by the Boston Blue Sheet (a New England benchmark price), averaged approximately 33 percent less than in 1987. Cod block prices, outlined in Diagram V.2, averaged about 19 percent less than prices paid during 1987. It is forecast that 1989 could signal a return to higher prices given expected decreases in the supply of cod available for major markets such as the United States. Fish prices are not, however, expected to reach the high levels recorded during the latter months of 1986 and early 1987.

Diagram V.2


BOSTON BLUE SHEET WHOLESALE PRICES
FROZEN FISH PRODUCTS
1982 TO 1988
COD FILLET
COD BLOCK
$ CANADIAN PER POUND
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1982 A J O 1983 A J O 1984 A J O 1985 A J O 1986 A J O 1987 A J O 1988 A J O
NOTE: COD FILLET PRICE REFERS TO BONELESS 5 LB. 1-3 PACKAGE, GRADE A.
COD BLOCK PRICE REFERS TO COD AND COD FILLET PACKED IN 16.5 LB. BLOCKS, GRADE A.
SOURCE: NEWFOUNDLAND STATISTICS AGENCY, CABINET SECRETARIAT

The Province's main competitors in the United States groundfish market are Denmark, Iceland, and Norway. Cod landings by these countries over the past twelve years are outlined in Table V.4. Cod landings during 1988 fell by approximately 5.6 percent as all countries, with the exception of Canada, recorded a decrease in landings. Cod landings are forecast to fall in 1989 by approximately ten percent as most countries have reduced cod quotas in order to facilitate growth in their fish stocks. Such a large drop in the amount of cod available for major importers like the United States, could precipitate price increases, and result in higher prices paid to processors and fishermen alike. This would serve to boost revenues and help mitigate the effects of lower landings on the fishing industry.

The outlook for the Province's fishing industry in 1989 is for lower groundfish landings and hence, reduced employment in fish processing. Lower landings are the result of reduced offshore cod and yellowtail flounder quotas. The potential to mitigate, but certainly not offset, the effects of the reduced quotas on the industry will depend primarily on the success of the inshore/nearshore fleets, particularly those fleets stationed on the south and west coasts. Other opportunities to offset reductions in landings could be realized through the efforts of some fish companies to increase their use of formerly underutilized species. Also on a positive note, most seafood market analysts believe that cod prices in the United States will rise in 1989 and this could help to cushion the impact of a reduction in landings on the industry.

TABLE V.4

ATLANTIC COD LANDINGS - SELECTED COUNTRIES
1977 - 1988
(metric tonnes - round weight)

Year	Canada	Denmark	Iceland	Norway	U.S.A.	Total
1977	235.4	153.5	329.7	426.5	34.3	1,179.4
1978	296.4	133.0	319.7	403.9	39.2	1,192.2
1979	370.2	136.6	360.1	334.3	44.4	1,245.6
1980	418.0	164.1	429.1	281.2	53.6	1,346.0
1981	432.6	194.6	460.6	338.9	45.6	1,472.3
1982	510.7	193.1	382.3	344.4	47.4	1,477.9
1983	509.0	185.6	293.9	284.0	51.0	1,323.5
1984	475.9	193.4	281.5	276.4	43.9	1,271.1
1985	475.1	183.3	322.8	247.9	37.6	1,266.7
1986	460.0	154.1	365.9	266.0	27.7	1,273.7
1987	458.0	158.7	375.8	298.2	26.8	1,317.5
1988	461.0	140.0	360.6	257.0	25.6	1,244.2

Source: Groundfish Market Outlook, Volume 1, Market Report Number 4, Department of Fisheries and Oceans, Ottawa; News From Iceland, January 1988; Economic Research and Analysis Division, Cabinet Secretariat.

Interruptions in fish harvesting activities precipitated by work stoppages at Fishery Products International and National Sea Products early in 1989 are not expected to adversely affect either Company's ability to fully utilize its enterprise allocation as both are expected to intensify efforts during the remainder of the year and fully utilize their cod allocations.

The CSC is expecting an improved performance during 1989 as a result of efforts to increase its supplies of saltfish from non-traditional producers and diversify into other higher valued products.

The outlook for the capelin fishery in 1989 is mixed. There are no constraints expected on the resource side and traditional competitors are not expected to be able to meet Japanese market standards. However, the amount of capelin absorbed by the major consumer, Japan, is expected to be down from 1988.

Continued diversification into other species such as lumpfish and increased utilization of other species such as shrimp and redfish should improve the prospects of the fishery this year and beyond.

VI. FORESTRY

The forest industry is comprised of both primary activities, including harvesting and forest management, and the secondary processing of wood into such products as newsprint and lumber. This industry accounted for about 7.7 percent of Gross Domestic Product (GDP) in the goods producing sector in 1987 and 2.9 percent of total GDP. An estimated 4,100 persons were employed in the forest industry on a monthly average basis in 1988 making it the third largest employer in the Province's goods producing sector. Much of the employment in primary forest activities, which accounts for about one-third of total forestry employment, is seasonal or part-year.

About 82.5 percent of timber harvested in Newfoundland and Labrador is used in the Province as raw material for the manufacture of products such as newsprint, sawn lumber and construction timbers. The remaining 17.5 percent of timber harvested in the Province is burned locally as fuel except for a small amount which is exported as pulpwood to European markets. Pulpwood used in the production of newsprint by the Province's three pulp and paper mills accounts for the largest share of harvested timber.

Production of pulpwood amounted to 1.88 million cubic metres in 1988, the largest volume produced since 1984 and an increase of 5.6 percent over the previous year. The interruption of pulpwood operations due to the strike at the newsprint mill in Corner Brook did not adversely affect annual harvest levels as weather permitted logging operations to continue until the end of the year.

TABLE VI.1

FOREST MANAGEMENT EXPENDITURES AND OUTPUT
1986-87 TO 1988-89(1)

	1988/89p	Total (1986/87 to 1988/89)
Expenditures ($ million)		
Silviculture	7.64	20.88
Forest Access Roads	1.57	4.24
Forest Management	2.18	5.97
Forest Protection	0.66	1.34
Forest Products Development	0.57	1.43
Administration, Communication & Evaluation	0.84	2.20
Total Expenditures	**13.46**	**36.06**
Silviculture Output		
Total Area Treated (hectares)	13,089	34,615
Seedlings Planted (millions)	10.3	24.8

Notes: (1) Includes Canada/Newfoundland Forest Resource Development Agreement 1986-1990, expenditures only.

p: preliminary estimate

Source: Department of Forestry.

In addition to harvesting operations, primary forestry activities also include the management and protection of the Province's forest resource, a responsibility which rests with the Provincial Government. Management activities, which are carried out in conjunction with the pulp and paper industry, are designed to ensure long term timber supplies by enhancing resource productivity through accelerated forest growth and greater resource utilization. The 1986-1990 Canada/Newfoundland Forest Resource Development Agreement is the primary funding source for forest management. Expenditures under the Agreement during 1988/89 were an estimated $13.5 million while the pulp and paper industry contributed an additional estimated $2.5 million. Expenditures under the Agreement since 1986/87, and the types of activities funded, are outlined in Table VI.1.

Another important aspect of Government's forest management responsibility is the protection of the resource from damage by forest fires, insects and disease. The Province experienced the best forest fire season in recent history in 1988/89, as indicated in Table VI.2, due largely to favorable weather conditions but also to the Province's improved firefighting capabilities. The spruce budworm infestation which began in the 1970s has subsided making aerial spraying unnecessary. The recent outbreak of the hemlock looper has also subsided somewhat, as the area requiring aerial spray treatment declined from 125,000 hectares in 1985 to 69,000 hectares in 1988.

TABLE VI.2

FOREST FIRE STATISTICS
NEWFOUNDLAND AND LABRADOR
1986-87 TO 1988-89

	1986/87	1987/88r	1988/89p	% Change
Number of Fires Reported	193	287	116	-59.6
Total Area Burned	108,831	17,129	1,758	-89.7
Suppression Costs ($ million)*	$4.4	$2.9	$1.9	-34.5

Note: * This cost excludes waterbomber expenses from the Department of Transportation.
p: preliminary; r: revised

Source: Department of Forestry.

Production of newsprint dominates manufacturing activity in the forest industry. There are three pulp and paper mills in the Province, located in Corner Brook, Grand Falls and Stephenville, all of which rely heavily on highly competitive foreign markets, particularly the United States (see Map VI.1). Conditions in these markets have a significant bearing on the performance of the industry in this Province and the rest of Canada.

The Canadian newsprint industry, which is the largest supplier of newsprint in the world, continued to perform well during 1988, operating on average at 99 percent of rated capacity. This represents a continuation of the high rate of capital utilization which has been experienced in recent years and reflects the strong market conditions which have generally prevailed. As outlined in Table VI.3, total production reached almost 10 million tonnes in 1988, an increase of 3.1 percent over 1987, and the volume of shipments also increased by 1.1 percent. Shipments to the United States, which is the largest consumer of newsprint in the world, remained at the historically high level of nearly 7.1 million tonnes, unchanged from 1987; shipments to Canadian and other markets increased by 3.7 and 4.5 percent respectively.

Map VI.1

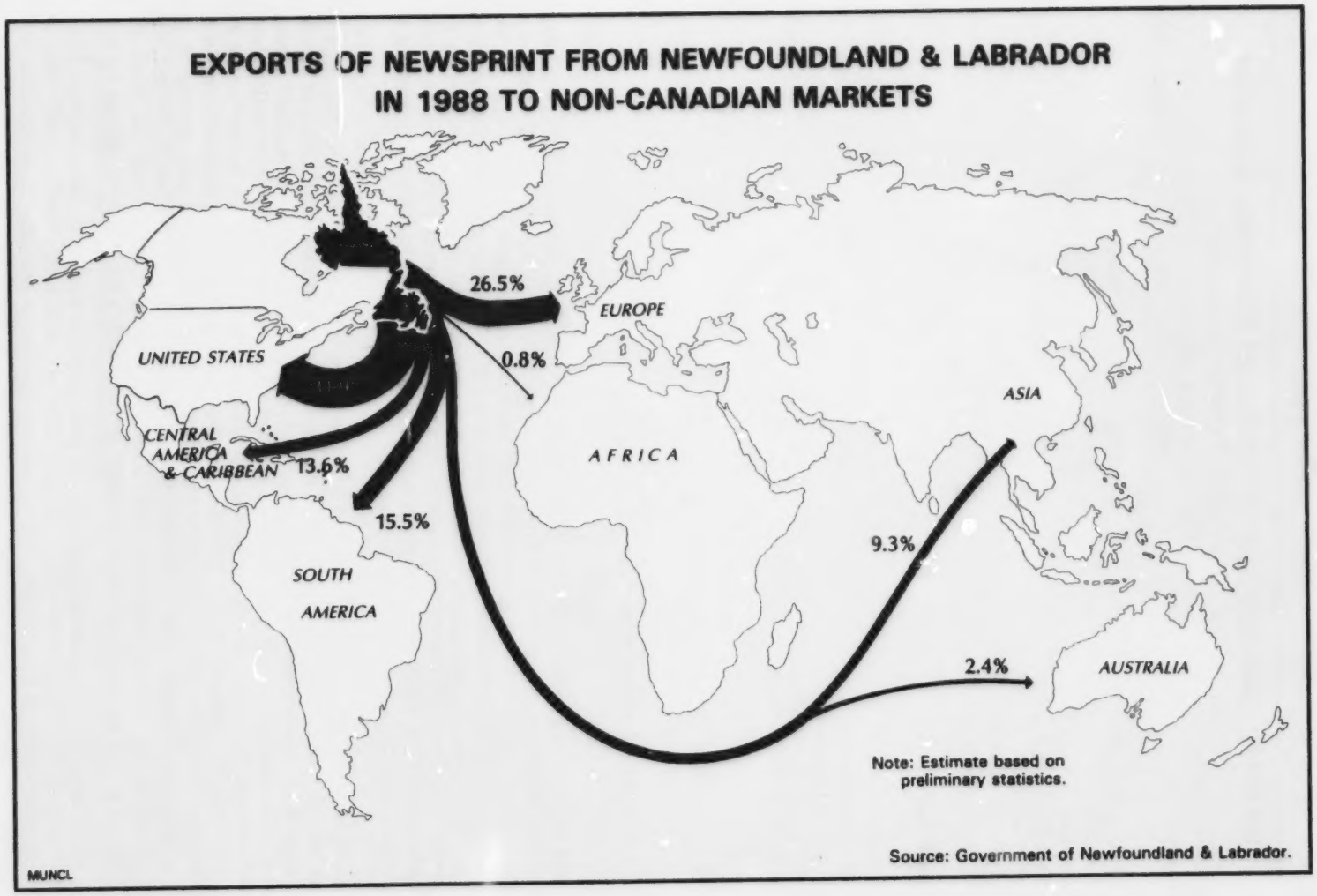

EXPORTS OF NEWSPRINT FROM NEWFOUNDLAND & LABRADOR
IN 1988 TO NON-CANADIAN MARKETS
26.5%
EUROPE
0.8%
UNITED STATES
ASIA
AFRICA
CENTRAL
AMERICA
& CARIBBEAN
13.6%
15.5%
9.3%
SOUTH
AMERICA
2.4%
AUSTRALIA
Note: Estimate based on
preliminary statistics.
Source: Government of Newfoundland & Labrador.
MUNCL

TABLE VI.3

SELECTED CANADIAN AND UNITED STATES NEWSPRINT STATISTICS ('000 Tonnes)

Canada	1987	1988p	Percent Change
Operating Rate (%)	98%	99%	
Production	9,669	9,969	3.1
Shipments	9,757	9,867	1.1
To United States	7,087	7,087	0.0
To Canada	1,183	1,227	3.7
To Other Markets	1,487	1,554	4.5
Mill Stocks (December)*	189	290	53.4
United States			
Production	5,300	5,427	2.4
Total Consumption	12,323	12,377	0.4
Mill Stocks (December)*	36.1	48.1	33.2
Consumer Stocks (December)*	1,411	1,435	1.7
Days Supply (December)*	45	46	

Note: * Indicates level at the end of December

p: preliminary

Source: Canadian Pulp and Paper Association, Monthly Newsprint Statistics.

Some signs of market weakness were evident in the United States during 1988. Consumption of newsprint increased by a mere 0.4 percent, buoyed by a relatively strong fourth quarter performance, and consumer stocks of newsprint increased during the year to stand 1.7 percent higher at the end of 1988 when compared to December 1987. The slow growth in consumption was primarily due to sluggish advertising growth and more economical usage of newsprint by United States publishers. The weak growth in consumer demand, in combination with increased production in Canada and the United States, were reflected in rising mill stocks in both countries and selling prices below those listed by newsprint producers.

Canadian newsprint producers received a higher price for their product in 1988 than in the previous year. Newsprint was listed at US$650 per tonne in the eastern United States (a benchmark price) throughout 1988 as illustrated in Diagram VI.1, up by 10.2 percent over the 1987 average list price level. The benefits of this price increase to Canadian producers was partly eroded, however, by an appreciated Canadian dollar relative to its United States counterpart as well as by greater price discounting in the marketplace. This discounting resulted from rising levels of consumer and mill inventories, slow growth in consumption and attempts by new greenfield mills coming on stream in 1989 to gain future market share. Price discounting averaged about 10 percent in the east, causing transaction prices to average approximately US$600 per tonne. As a result of these market conditions, the price increase originally anticipated by the industry for mid-1988 did not materialize.

Diagram VI.1

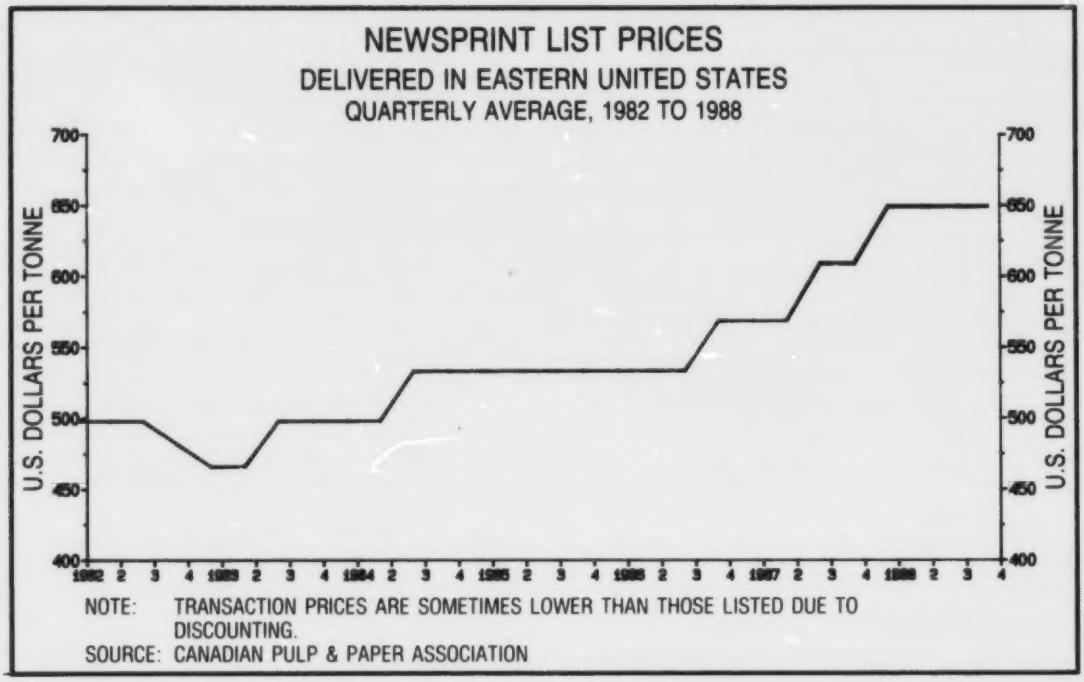


TABLE VI.4

NEWSPRINT PRODUCTION STATISTICS
NEWFOUNDLAND AND LABRADOR
1987 AND 1988

	1987r	1988p	% Change
Productive Capacity (tonnes)	728,000	723,000	-0.7%
Production (tonnes)	671,992	648,298	-3.5%
Shipments (tonnes)	660,168	646,388	-2.1%
Value of Shipments ($ million)	$516.0	$517.0	0.2%

Notes: r: revised; p: preliminary

Source: Canadian Pulp and Paper Association; Department of Forestry.

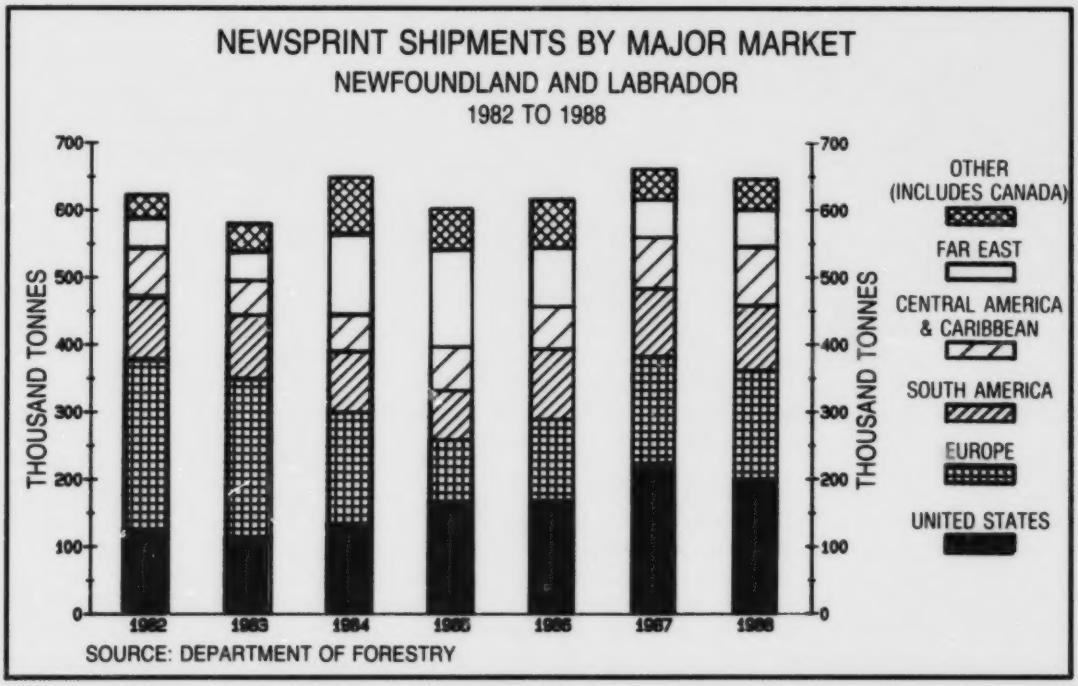
The performance of the Province's newsprint industry in 1988 was hampered by the limitations on production imposed by a work stoppage and an ongoing modernization program at the Corner Brook mill. Due to these limitations, the total volume of newsprint produced by the Province's industry declined by 3.5 percent to 648,298 tonnes in 1988, as outlined in Table VI.4. The overall decline in the volume of newsprint produced in 1988 occurred in spite of a good first half and

fourth quarter performance. The 41 day work stoppage which idled the Corner Brook Pulp and Paper mill between August 18 and September 26 resulted in approximately 30,000 tonnes of lost production during the third quarter. Mill modernization activity at Corner Brook constrained pulping capacity and contributed to the decline in output during 1988.

Due to the decline in production, newsprint shipments dropped by 2.1 percent from the previous year, however, the value of newsprint shipped (based on list prices) increased slightly to $517 million, up by 0.2 percent over 1987. The increased value resulted from the higher newsprint list prices but was tempered by the decreased volume of shipments and the appreciated value of the Canadian dollar against its American counterpart.

The market destination of newsprint shipped from the Province remained fairly stable in 1988. Shipments to the United States and Europe continued to dominate exports as shown in Diagram VI.2, representing about 58 percent of the total volume sold to non-domestic customers. The slight decline in shipments to the United States in 1988 was the result of the strike at the Corner Brook mill. The value of the Canadian dollar, relative to European market customers' and competitors' currencies, served to stimulate European market penetration during the last three years. Of some concern, however, was the rising value of the Canadian dollar relative to these same European currencies during 1988, which made Canadian exports less competitive in that market sector. The industry continued to export to a wide variety of other markets, as the remaining 42 percent of exports were shipped to customers in 19 countries around the world.

Diagram VI.2



The mill modernization program, which began in 1985, continued during 1988. The $300 million modernization of the Corner Brook mill continued with approximately $46 million spent on the program in 1988, bringing cumulative expenditures to just over $200 million by year end. Modernization of the Abitibi-Price mill in Grand Falls was substantially completed in 1987. The modernization of the pulp and paper industry has already improved mill efficiency and the quality of newsprint produced at both the Corner Brook and Grand Falls mills and further improvements

will be realized upon completion of the program at Corner Brook. As a result, the Province's newsprint industry is well-positioned to compete for quality demanding markets well into the future.

Sawmilling is the second largest manufacturing activity in the Province's forest industry. Virtually all of the lumber produced is consumed in local markets. Sawmilling activity increased in 1988 as demand for domestically produced lumber strengthened, spurred by increased levels of residential dwelling starts during the year. Preliminary estimates indicate that production reached 51.2 million board feet in 1988/89, an increase of 5.0 percent over the previous period and the highest level achieved since the 1940s. In addition, the provision of a Provincial lumber grading service through the Newfoundland Lumber Producers Association has improved the acceptance of domestically produced lumber by Provincial consumers. It ensures that domestic lumber meets the same quality standards as lumber imported from mainland Canada.

The outlook for the Province's newsprint industry in 1989 is generally positive as the industry has substantial potential to increase output over last year. The bulk of the improvement will occur at the Corner Brook mill where production last year was interrupted by a work stoppage. Also, productive capacity was boosted at the Corner Brook mill earlier in 1989 as two new lines of pulp came on stream at the end of February, and the upgrading of the largest paper machine was substantially completed in March. The Abitibi-Price mills at both Grand Falls and Stephenville will have slightly increased operating capacity during the year, and as such, should be well positioned for a good performance in 1989.

International market conditions for newsprint appear less favorable for 1989, a factor which could generate more downtime at mills in the Province and other parts of Canada than in recent years. The underlying weakness in the United States market observed in 1988 is expected to continue in 1989 and new productive capacity scheduled to come on stream in North America and worldwide will outstrip any anticipated demand growth, thus putting downward pressure on prices. A continued strong performance of the Canadian dollar against both the United States and to a lesser degree, European currencies could further erode Canadian producer profit margins. As such, the competition for markets will intensify during 1989, and price increases anticipated for early 1989 may not be realized until much later in the year, if at all. The broad diversity of export markets of the Province's newsprint industry compared with the Canadian industry on the whole, however, could constitute an asset in 1989 making it less vulnerable to a slowdown in the United States market and, as such, the Province's producers expect to ship 99.7 percent of production during the year.

Overall, the Province's forest industry is expected to perform well in 1989. The expected increase in newsprint production would stimulate pulpwood production. The sawmill industry is expected to record a good performance buoyed by continued strength in residential construction activity; as such, sawlog production should also increase. Production of pulpwood for export is expected to remain stable and commercial fuelwood consumption is expected to rise because of the start-up of two large-scale wood chip users in Roddickton and Grand Falls during the year. Expenditures on forest management under the Forest Resource Development Agreement are expected to increase by about 12.5 percent and, in addition, two forestry programs designed to train operational forest management workers should be forthcoming during the year. These forest management programs will provide further stimulus to primary forestry activity in the coming year.

VII. MINING

The mining industry accounted for approximately 18.9 percent of GDP in the Province's goods producing sector and 7.0 percent of total GDP in 1987 (the most recent year for which data is available). A diverse range of mineral commodities are produced by the Province's mining industry as indicated in Table VII.1, however, iron ore continues to dominate the industry, accounting for about 82.5 percent of the total value of mineral shipments during 1988. In addition to mineral production, the industry continued to search for new sources of base metals, gold and industrial minerals for future development and extraction. Map VII.1 illustrates the locations of producing and developing mines, and major exploration projects throughout Newfoundland and Labrador.

TABLE VII.1

VALUE OF MINERAL SHIPMENTS
NEWFOUNDLAND AND LABRADOR
1988 ($ millions)

Mineral	Mine Location	Value of Production
1. Iron Ore	Labrador City, Wabush	776.0
2. Zinc	Daniel's Harbour	50.0
3. Gold	Hope Brook	40.3
4. Structural Materials	Various Locations	32.5
5. Asbestos	Baie Verte	29.0
6. Fluorspar	St. Lawrence	6.2
7. Gypsum	Flat Bay	2.4
8. Other		3.9
Total Value of Production		**$940.3**

Note: Data is preliminary. Structural materials include cement, sand and gravel, brick and stone. Other includes silica, pyrophyllite and peat.

Source: Provincial Department of Mines.

The mining industry witnessed strong growth in 1988. The total value of Provincial mineral shipments rose to approximately $940 million, a 31.7 percent increase in value compared to 1987. Mining and related activities employed 4,200 persons on a monthly average basis during 1988, representing an increase of about 9.7 percent. Output increased at most mines as did prices for major commodities such as iron ore, zinc and asbestos. The output of the Newfoundland and Labrador mining industry is shipped primarily to markets located outside Canada; in 1987, approximately 83 percent of the total value of mineral shipments was derived from exports. These exports consisted of iron ore, asbestos, zinc, gypsum, fluorspar and pyrophyllite with the largest proportion destined for the United States; a significant part of the Province's exports were also shipped to countries in Europe and Asia. Map VII.2 illustrates the proportion of the Province's mineral exports shipped to various markets in 1987.

Map VII.1

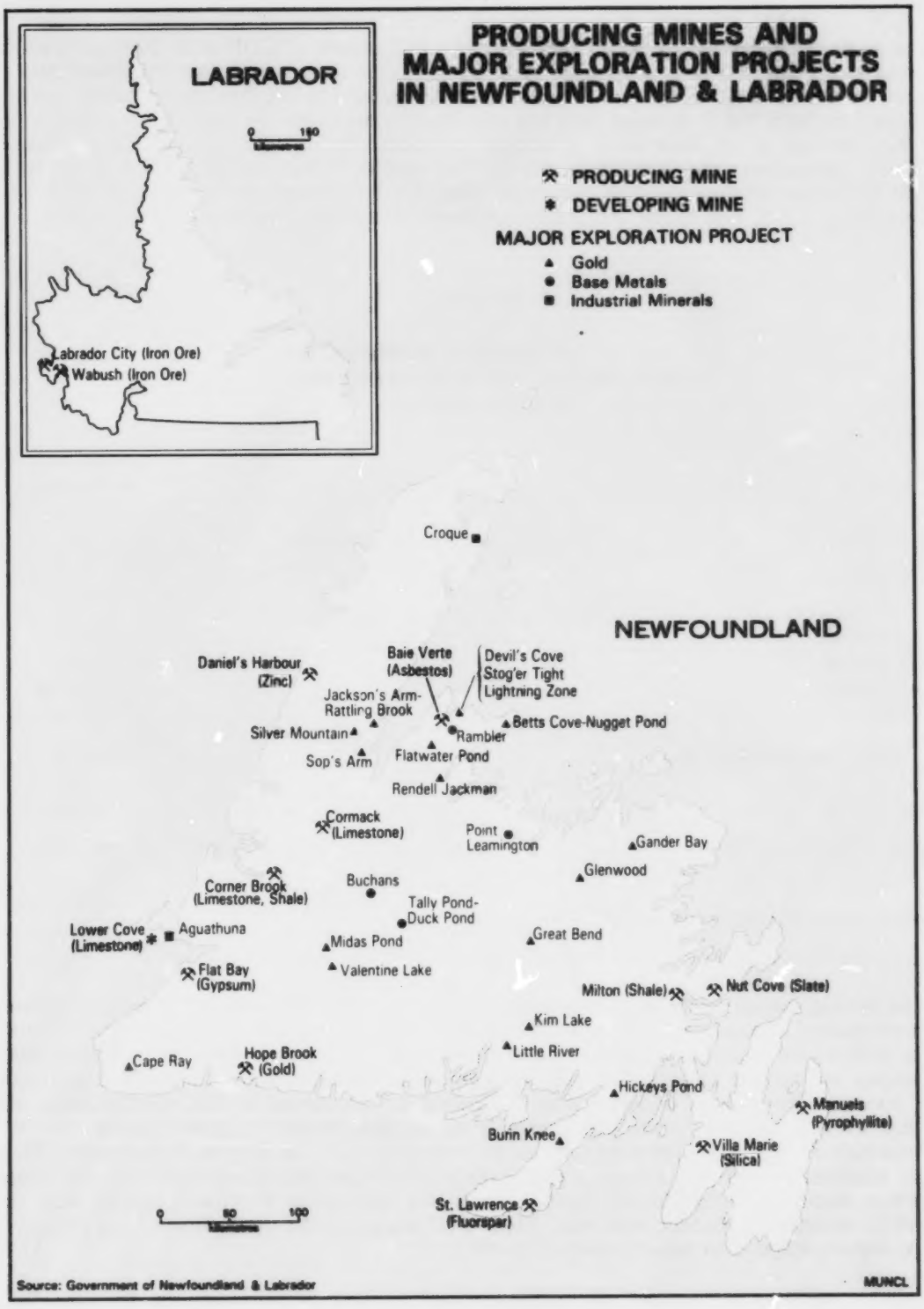
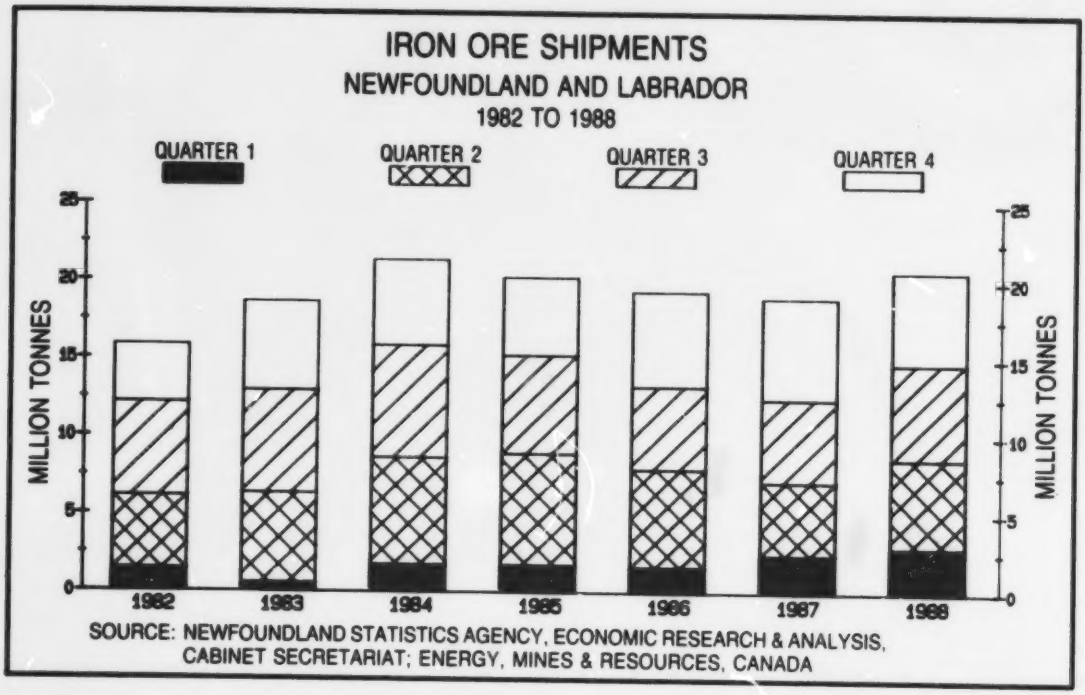

PRODUCING MINES AND MAJOR EXPLORATION PROJECTS IN NEWFOUNDLAND & LABRADOR
PRODUCING MINE
DEVELOPING MINE
MAJOR EXPLORATION PROJECT
Gold
Base Metals
Industrial Minerals
LABRADOR
0 150
Labrador City (Iron Ore)
Wabush (Iron Ore)
Croque
NEWFOUNDLAND
Daniel's Harbour (Zinc)
Baie Verte (Asbestos)
Devil's Cove
Stog'er Tight
Lightning Zone
Jackson's Arm-Rattling Brook
Betts Cove-Nugget Pond
Silver Mountain
Rambler
Sop's Arm
Flatwater Pond
Rendell Jackman
Cormack (Limestone)
Point Leamington
Gander Bay
Glenwood
Corner Brook (Limestone, Shale)
Buchans
Tally Pond-Duck Pond
Lower Cove (Limestone)
Aguathuna
Midas Pond
Great Bend
Flat Bay (Gypsum)
Valentine Lake
Milton (Shale)
Nut Cove (Slate)
Kim Lake
Little River
Cape Ray
Hope Brook (Gold)
Hickeys Pond
Manuels (Pyrophyllite)
Burin Knee
Villa Marie (Silica)
St. Lawrence (Fluorspar)
0 50 100
Source: Government of Newfoundland & Labrador
MUNCL

Diagram VII.1

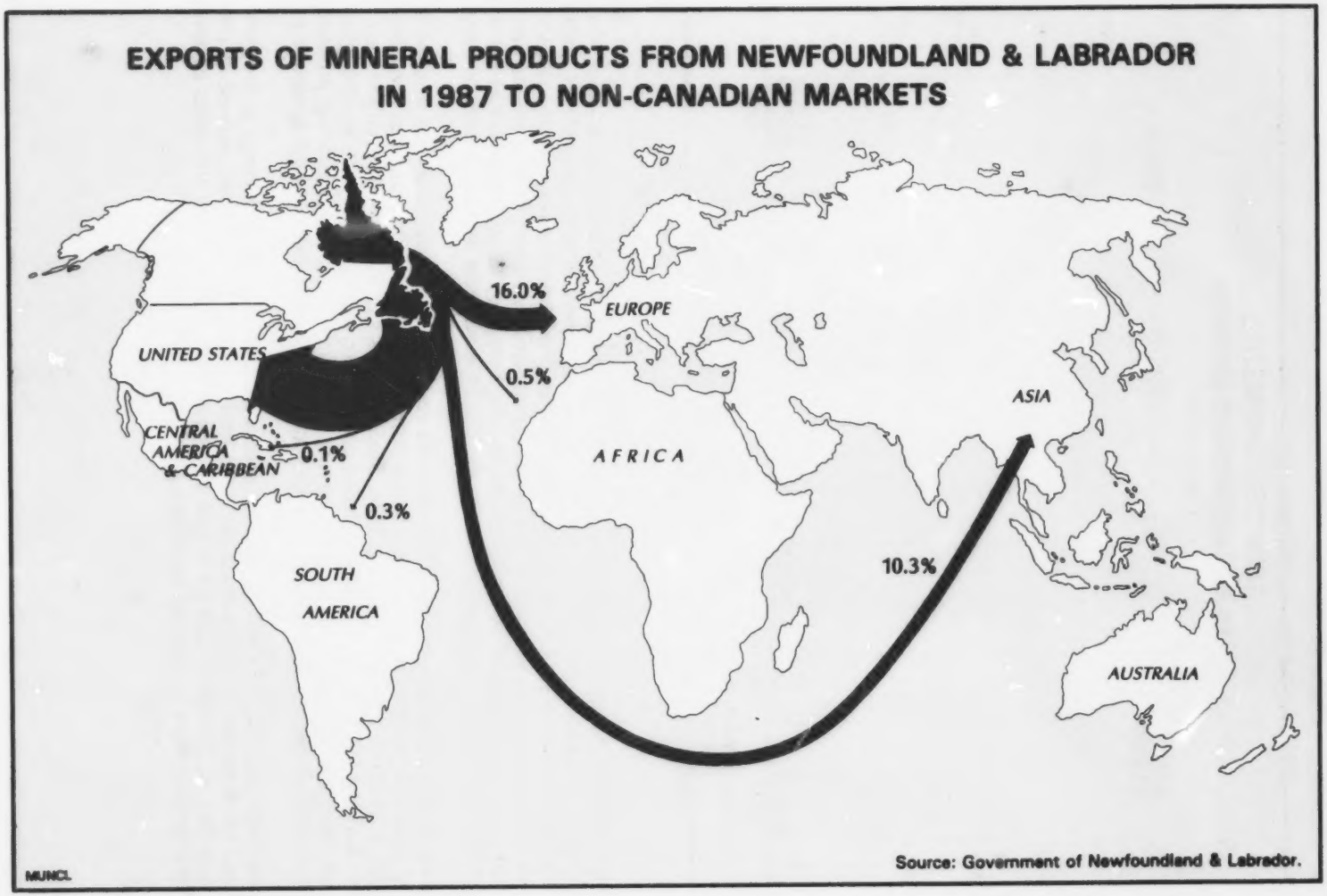


Shipments of iron ore by the Province's two iron ore producers located in Labrador, the Iron Ore Company of Canada (IOCC) and Wabush Mines, increased by approximately 13 percent to over 20 million tonnes in 1988 compared to 1987. The improved performance caused employment to rise to 2,260 persons, an increase of 5.4 percent. Increased shipments of iron ore are primarily attributed to increased demand in the United States, the Province's largest market, where it is used in the production of steel. Steel production in the United States rose by 12.2 percent last year.

Research and development undertaken by both companies in recent years has resulted in the production of iron ore products which are better suited to market demands and has contributed to the strong performance recorded during 1988. Since 1986, a wider variety of products have been produced and in 1988 iron ore products included concentrate, fluxed pellets with varying silica and maganese content, and acid pellets with varying manganese content. Improving productivity, product diversification and product marketability are ongoing objectives of both companies.

Indications are that 1989 will be another good year for the iron ore industry in the Province. Shipments are expected to approximate the 1988 level, however a significant increase in iron ore prices expected in European, Japanese and Korean markets could boost the value of iron ore shipments. Employment is expected to remain stable.

Map VII.2


EXPORTS OF MINERAL PRODUCTS FROM NEWFOUNDLAND & LABRADOR
IN 1987 TO NON-CANADIAN MARKETS
16.0%
EUROPE
0.5%
UNITED STATES
CENTRAL
AMERICA
& CARIBBEAN
0.1%
0.3%
AFRICA
ASIA
10.3%
SOUTH
AMERICA
AUSTRALIA
MUNCL
Source: Government of Newfoundland & Labrador.

Newfoundland Zinc Mines recorded its best performance in several years, as shipments of zinc concentrate reached approximately 57,800 metric tonnes, valued at $50.0 million. This represents a significant improvement over the previous year when the mine operated on a limited basis, and only began processing ore late in September. Employment at Newfoundland Zinc Mines in 1988 averaged 160 persons, up from 83 persons in 1987. The average price of zinc in 1988 was US$0.56 per pound, an increase of 55.5 percent compared to 1987.

Since the mine reopened in July 1987, Teck Corporation, majority owner of Newfoundland Zinc, has continued to search for additional ore reserves near its present operation. The company embarked on an exploration drilling program in 1987 which resulted in the discovery of approximately 285,000 additional tonnes of ore by November 1988. Another drilling program in the general area of the mining operation is being carried out by Newfield Minerals under agreement with Teck Corporation; Newfield has committed $2 million under this agreement. Some mineralization has been discovered but drilling was halted in September 1988 due to unfavorable weather conditions. Drilling will continue in early 1989 when conditions improve and if results are favourable, an additional $1.5 million may be spent. As it currently stands, known reserves will extend the life of this operation to mid-1990. Shipments from the zinc mine in Daniel's Harbour are forecast to increase slightly in 1989 and market conditions are expected to remain favourable. Employment is expected to remain stable at about 150 persons.

Hope Brook Gold Inc. shipped 71,790 ounces of gold valued at about $40.3 million and employed an average of 205 persons during 1988, its second year of operation. This represented a significant increase over the previous year as the facility only began production in August 1987. Mining activity during most of 1988 consisted of extracting ore from an open pit mine and processing the ore using a heap leach facility. A conventional gold mill commenced production in September 1988. The gold mill will be used in conjunction with the heap leach facility until the heap leach is phased out around mid-1989. Ore from the underground mine is expected to be available for processing early in 1989. Production of gold is forecast to increase to 142,000 ounces in 1989, almost double the amount produced last year and average employment is expected to increase to about 250 persons.

Baie Verte Mines Inc., the sole producer of asbestos in the Province, experienced its best year since the mine was reopened in 1982 as approximately 73,000 tonnes of asbestos were shipped, an increase of 16.8 percent over 1987. The value of shipments increased by over 30 percent due to the increased volume shipped and to an improvement of approximately eight percent in the average price per tonne of asbestos. Employment remained stable during 1988, averaging 350 persons.

On November 8, 1988 the Federal Government announced financial assistance in excess of $7 million from the Atlantic Canada Opportunities Agency to help establish a new asbestos processing plant at the mine in Baie Verte. The plant will take advantage of an innovative, state-of-the-art "wet" milling technique to process asbestos fibre from tailings currently discarded as waste from the existing mill; production is forecast to begin by early 1990. Mining activity and production of asbestos using the existing dry process is expected to continue until 1992. The new wet mill will extend the life of the asbestos operation by 15 to 20 years. It will immediately create 40 new jobs and maintain up to 70 jobs upon the closure of the dry mill operations. Shipments of asbestos are forecast to increase substantially in 1989 as demand in Third World countries is expected to rise. The company also expects prices to increase by about ten percent in 1989 and employment levels to remain stable.

During 1988, St. Lawrence Fluorspar Limited shipped approximately 44,500 tonnes of fluorspar valued at about $6.2 million, and employment at the mine averaged 103 persons. This represented a substantial increase in output compared to 1987 when the volume and value of shipments were 11,758 tonnes and $1.5 million respectively, and employment averaged 56 persons. The mine recommenced operations in 1987 after being closed since 1978, and did not experience a full year of production due to product quality problems; these problems have since been resolved. In 1989,

the company expects to reach full capacity utilization with shipments of 80,000 tonnes and employment will remain stable.

Output from the gypsum mine at Flat Bay, which is owned by Domtar Inc., decreased substantially in 1988 compared to 1987; shipments totalled 180,000 metric tonnes, a decrease of about 59 percent, and employment averaged 21 persons, down from 55 the previous year. The decline in output was due to a reduced operating period and lower production levels while in operation. Approximately ten percent of output is sold in the Province to North Star Cement and Atlantic Gypsum, and the remainder is marketed to cement and wallboard manufacturers in the eastern United States and Canada. The future of the mine was enhanced considerably by a decision of Domtar Inc. during 1988 to construct a new gypsum wallboard plant in New Hampshire and supply that facility with gypsum from the Flat Bay mine. The New Hampshire plant is scheduled for completion in 1990 and at that time it is anticipated that the plant will consume 300,000 to 350,000 tonnes of St. George's gypsum a year. Shipments in 1989 are expected to increase to approximately 315,000 tonnes of gypsum and employment may increase slightly to about 25 persons.

Newfoundland Minerals Ltd., the only producer of pyrophyllite in Canada, is a year-round operation which normally employs 17 people. The company produces from June to September and removes waste material from the site for the remainder of the year. The main market for the product is the United States where pyrophyllite is used in making ceramic tiles. Shipments from the mine increased by about 15 percent in 1988 compared to 1987. Shipments in 1989 are forecast to approximate 1988 levels.

Dunville Mining Company, a subsidiary of Albright and Wilson Americas, extracts silica which is used as a flux for the phosphorus plant in Long Harbour. The operation, which is seasonal, closed for the winter on October 28, 1988. Shipments increased by approximately 10 percent in 1988 compared to 1987. Production of silica will not resume in 1989 due to the impending closure of the phosphorus plant in August, however, shipments from stockpiles will continue until that time.

North Star Cement operates limestone and shale quarries near Corner Brook for use in the production of cement. The company normally operates for a nine month period, with a scheduled closure occurring near the end of November. Shipments totalled approximately 83,000 tonnes in 1988, a slight increase compared to 1987. Average employment during the company's production period was approximately 100 persons. Shipments in 1989 are forecast to increase to about 100,000 tonnes.

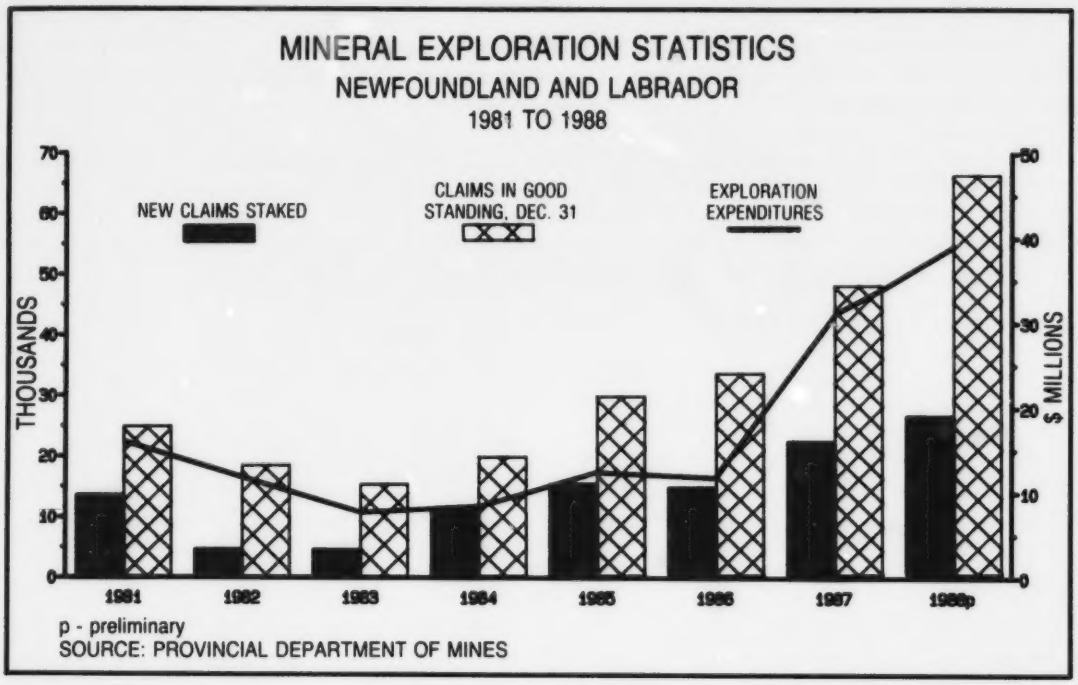
Trinity Brick Products Limited quarries shale on Random Island for the manufacture of brick at its plant in Milton. Shipments of brick were valued at approximately $1.4 million in 1988, an increase of about 21 percent compared to 1987. The company began its seasonal shutdown in December 1988 and resumed production in the second quarter of 1989. Approximately 32 persons are employed at Trinity Brick during production. Shipments are forecast to increase significantly in 1989 due to an anticipated increase in local demand.

Havelock Lime Works' agricultural limestone quarry in Cormack shipped 6,300 tonnes of limestone in 1988 and employed approximately four persons during the year. This seasonal operation ceased production at the end of October and will reopen in the second quarter of 1989. Shipments in 1989 are expected to be equal to the 1988 level.

Construction of a limestone aggregate processing operation at Lower Cove on the Port Au Port Peninsula began in March 1988. Construction of the project was approximately 60 percent complete at the end of 1988. The operation will have a production capacity of four million tonnes of limestone aggregate per year which will be shipped to markets primarily in the eastern United States for use as crushed stone by the construction industry. Production, which is scheduled to begin in the fall of 1989, is forecast to approximate 800,000 tonnes and is expected to increase to

four million tonnes annually within a few years. Construction related employment averaged approximately 90 persons in 1988.

Diagram VII.2



Mineral exploration activity in the Province continued to grow during 1988, as illustrated in Diagram VII.2. The number of claims staked in 1988 was 26,199 and the number of claims in good standing as of December 31, 1988 was 65,822, increases of 18.6 and 38.1 percent respectively from 1987. Exploration expenditures were estimated at about $39 million, an increase of about $8 million over 1987. The number of claims staked, claims in good standing, and exploration expenditures attained record levels during 1988. Employment related to mineral exploration totalled approximately 600 persons in 1988.

As a result of the increased level of mineral exploration activity in recent years, there are many exploration projects located throughout the Province which may have potential for future development; the locations of these projects are illustrated in Map VII.1. The most promising and advanced exploration project is the Tally Pond - Duck Pond base metals venture in Central Newfoundland. This project has a high grade mineralized zone containing metal values comparable to those formerly mined at Buchans. The project has been registered under the Environmental Assessment Act and is undergoing a full Environmental Impact Study. A feasibility study has been undertaken and it is possible that a decision to proceed to the production stage will be made by year end. Among potential gold mine developments, the Cape Ray project is the most advanced venture in the Province. This deposit contains geological reserves of about 1.4 million tons of ore averaging 0.28 ounce of gold per ton. Approximately $15 million was spent on this property by various operators since it was discovered in the late 1970s. A feasibility study will be undertaken in 1989 and a decision to proceed with development could be made by the end of the year. In terms of industrial minerals, considerable interest has been expressed in the high-quality marble deposits located on the Great Northern Peninsula. Two companies are conducting detailed evaluations of deposits near Roddickton to determine if it is technically and economically feasible to establish commercial mining operations.

Several new exploration programs returned positive results from initial drill programs in 1988. The Stog'er Tight Showing, the Nugget Pond Showing and the Lightning Zone on the Baie Verte Peninsula, as well as the Valentine Lake Showing in Central Newfoundland, have emerged as interesting gold prospects. The Rambler base metals project near Baie Verte may also have development potential based on the results of the initial drill program.

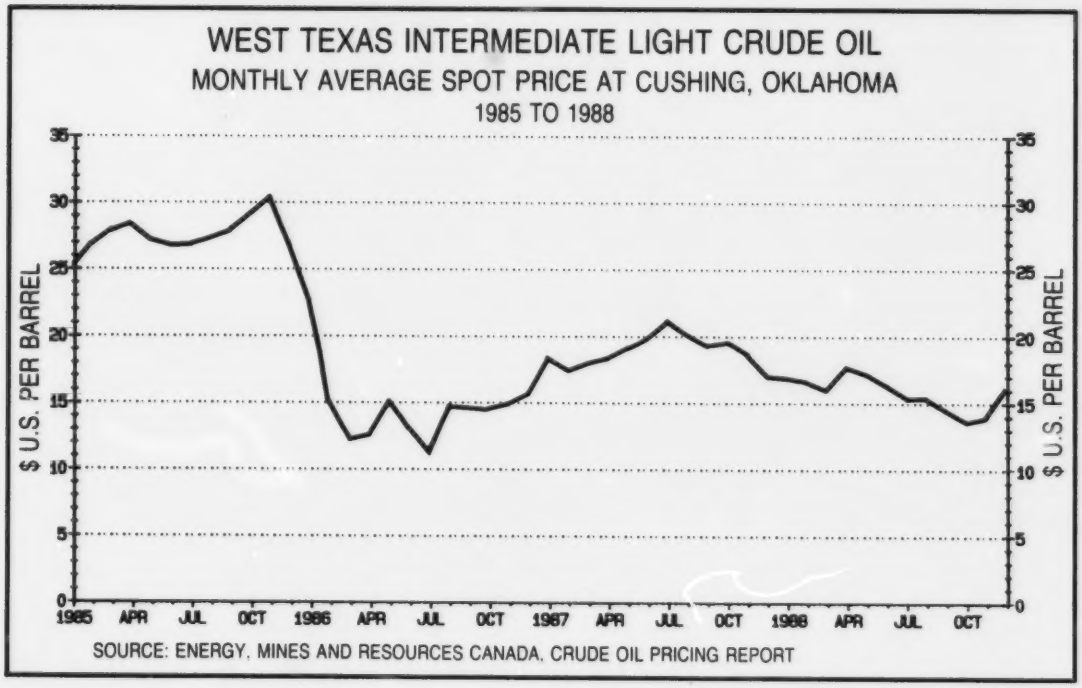
The level of mineral exploration in the Province is expected to remain high in 1989. Expenditures on mineral exploration are forecast to rise to $45 million and employment is expected to be maintained at high levels.

The outlook for the mining industry as a whole in 1989 is positive. Increased output at most operations in the Province, increases in the price of iron ore and asbestos and continued growth in mineral exploration are all expected to contribute to a positive performance by the industry during the year. Employment is expected to rise slightly and the total value of mineral shipments is forecast to increase by approximately 12 percent to reach $1.1 billion in 1989.

VIII. OFFSHORE OIL AND GAS EXPLORATION AND DEVELOPMENT

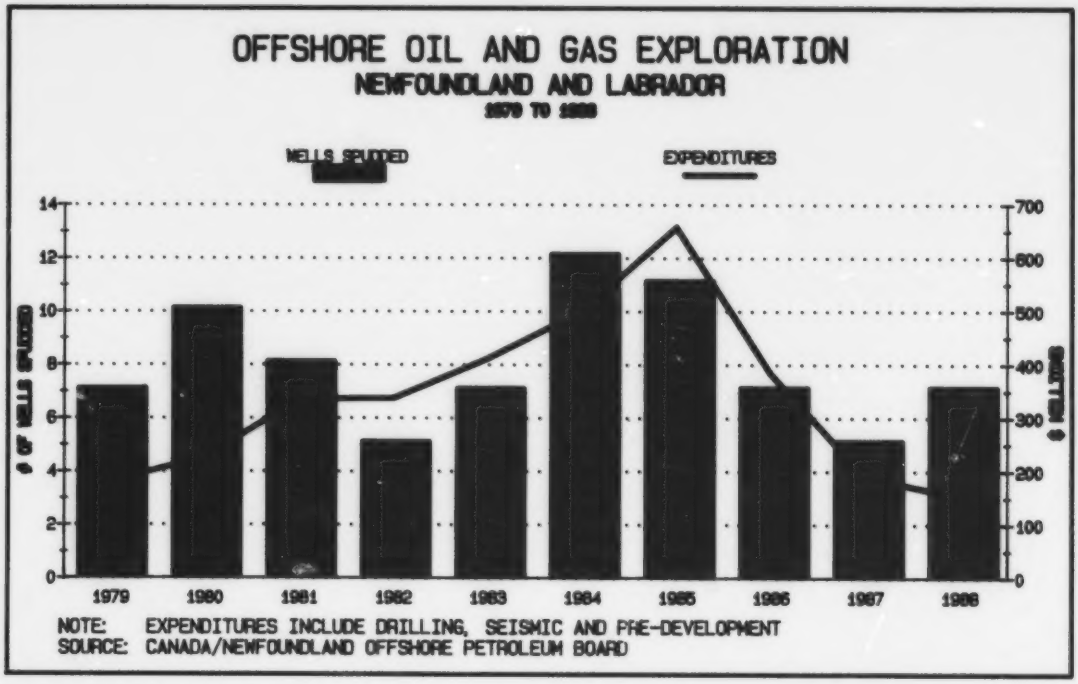
Exploratory drilling for hydrocarbons beneath the continental shelf off the coast of Newfoundland and Labrador began in 1966. The Hibernia P-15 well was drilled some 13 years later in 1979, and the magnitude and quality of the Hibernia discovery prompted an intensive period of activity for the oil and gas exploration industry. The discovery, coupled with high world oil prices and the introduction in 1980 of Petroleum Incentive Program (PIP) grants, also provided substantial incentives to increased levels of offshore exploration activity. Between 1980 and 1985, exploration expenditures increased at an annual average rate of 23.4 percent, peaking at $644.8 million in 1985. Expenditures have decreased every year since then in response to lower world oil prices, the withdrawal of PIP grants in 1986, and lower drilling costs.

Diagram VIII.1



The price of West Texas Intermediate light crude oil (a North American benchmark price), which remained at levels in excess of US$30 per barrel for the first half of the decade, collapsed late in 1985. Prices recovered through to mid-1987, however, downward pressure on prices since that time has resulted from the Organization of Petroleum Exporting Countries' (OPEC) continued inability to control member countries' level of oil output and slow growth in world demand for crude oil. In addition, production from non-OPEC sources has increased in recent years thus contributing to an oversupply of oil on world markets. Oil prices declined steadily from their mid-1987 peak, except for a short rally in early 1988, and bottomed out at US$13.75 in October 1988. In response to an agreement on production quotas for OPEC member countries reached in November, however, the price of oil increased throughout the last two months of 1988 and stood at US$16.38 per barrel in December.

Diagram VIII.2



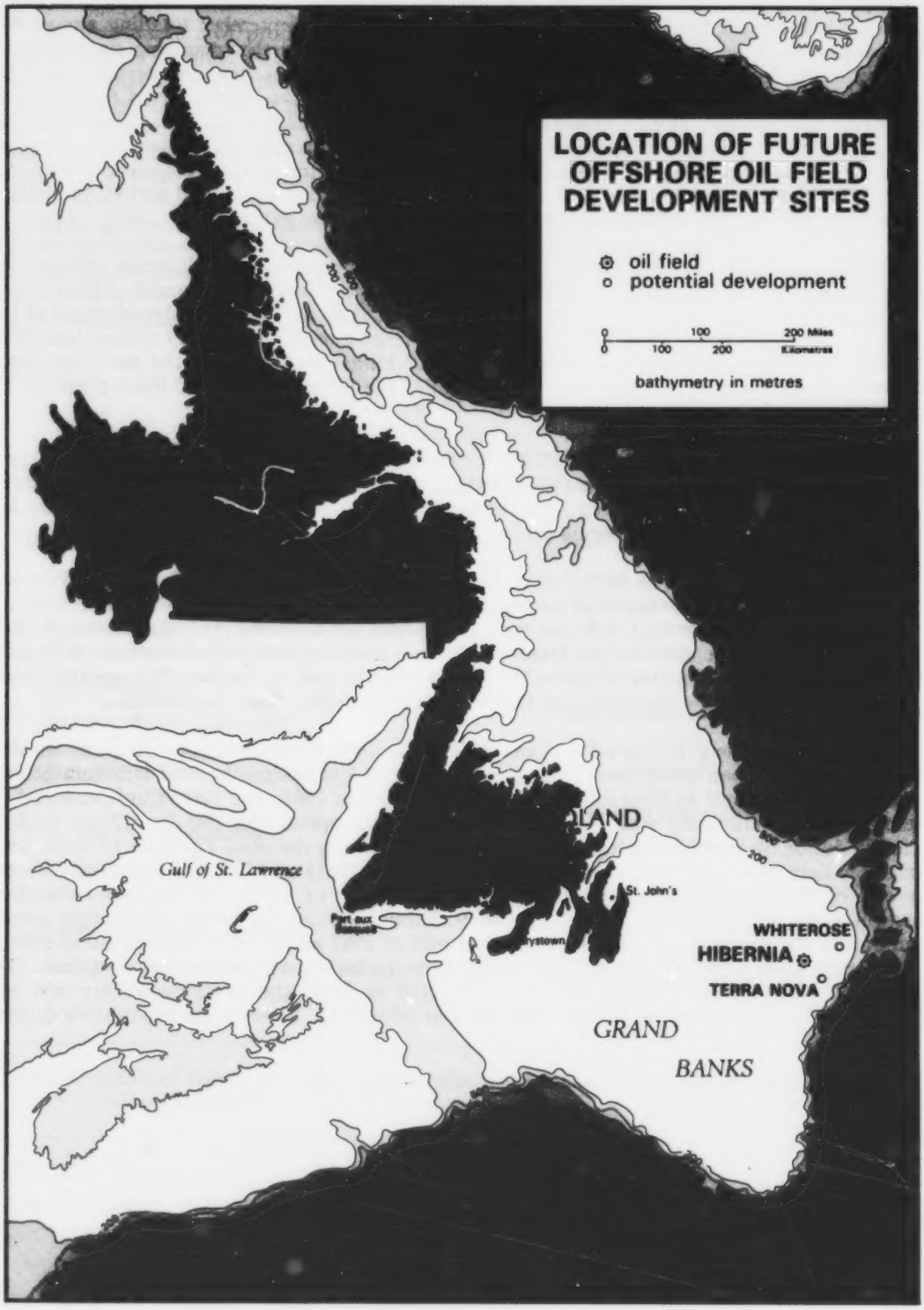
The level of drilling activity, as measured by wells spudded, increased in 1988 in concert with an overall increase in drilling activity throughout the Canadian industry. Drilling commenced on seven new wells off the coast of the Province in 1988, while drilling was completed on two wells started in 1987 and carried over into 1988. This compares to five new wells spudded and two carryover wells completed in 1987. Two drilling rigs operated in 1988 (the same as in 1987) and expenditures amounted to an estimated $152 million compared to $189 million in 1987; the decline in expenditures was partly due to the decreased cost of obtaining contracted drilling services. Drilling was undertaken on behalf of five companies during the year, however, the bulk of the activity was commissioned by Petro-Canada, Husky-Bow Valley and Texaco Canada Resources Ltd.

Petro Canada completed its delineation drilling program on the Terra Nova field in 1988. Encouraging results from the three delineation wells drilled during 1987 and 1988 (Terra Nova H-99, E-79 and C-09) supported the Terra Nova participants' decision to award, in the second quarter of 1988, a preliminary engineering contract to evaluate development options for the field.

Husky Bow Valley completed testing of the Whiterose E-09 delineation well by mid-1988. The results were very encouraging as this well indicated a thick, continuous oil reservoir within a single formation with an estimated possible recoverable oil accumulation of 200 to 300 million barrels. More delineation drilling is required, however, to confirm the extent of the reservoir.

Texaco Canada Resources Ltd. entered into an agreement with Husky Oil Ltd. during the third quarter of 1988 which allows the Company to earn a working interest in some Husky controlled offshore acreage by carrying out exploratory drilling. Texaco has fulfilled its commitment under this agreement by drilling exploratory wells on the Merasheen, Amethyst and Springdale prospects; Texaco has decided to forego its option of drilling one or two additional wells.

Map VIII.1


LOCATION OF FUTURE
OFFSHORE OIL FIELD
DEVELOPMENT SITES
oil field
potential development
0 100 200 Miles
0 100 200 Kilometres
bathymetry in metres
Gulf of St. Lawrence
St. John's
WHITEROSE
HIBERNIA
TERRA NOVA
GRAND
BANKS

The Canada/Newfoundland Offshore Petroleum Board issued a Call for Bids in March 1988 on eight parcels of land, totalling almost 260,000 hectares in the vicinity of the Hibernia, Terra Nova and Whiterose oil fields. The Board accepted bids in late September totalling almost $45 million for two of these parcels, however, no bids were received for the remaining six parcels. A work expenditure bid, submitted jointly by BP Canadian Holdings Ltd. (80 percent) and BP Resources Canada Ltd. (20 percent) in the amount of $36.7 million, was selected for parcel #4 containing 58,817 hectares. Petro Canada Inc. (50 percent) and Shell Canada Ltd. (50 percent) had their $8.1 million joint work expenditure bid for parcel #1 containing 54,869 hectares accepted. The exploration licenses issued to the successful bidders have terms of six years, divided into two periods of three years each. In order to have a license continue into the second period, the license holder must commence the drilling of a well in the first three year period.

Progress was made in 1988 towards the future development of the Hibernia offshore oil reservoir into a producing oil field. Canada and Newfoundland signed a "Statement of Principles" with members of the Hibernia consortium on July 18, 1988 to proceed with the development of the Hibernia oil field. The field, with proven and probable reserves estimated at 525 million barrels of recoverable oil, will require about seven years and $5.2 billion to develop in the pre-production, construction phase. Map VIII.1 indicates the location of the Hibernia field and other potential oil field development sites.

Chevron Canada Resources increased its interest in the Hibernia oil field during the third quarter of 1988 by acquiring Columbia Gas Development of Canada Ltd., and thus Columbia's 5.469 percent interest in the field. As a result of the takeover, Chevron Canada Resources now has a 21.875 percent interest in the Hibernia project.

Mobil Oil Canada, acting on behalf of the consortium, issued calls for tenders on the first two major contracts for the Hibernia field during the last half of 1988. The call for tenders on the contract for project services and topsides engineering and procurement was announced in early November. The call for tenders on the larger of the two multi-million dollar contracts to build a concrete base for the production platform was announced in late November. The specific award date of these tenders will be dependent on the timing of the overall fiscal negotiations.

The outlook for the offshore oil and gas industry in 1989 is positive from the point of view of development, however, prospects for exploration appear less optimistic. The Hibernia project may receive final approval by both industry and Government in 1989, and Petro Canada, based on the results of the preliminary study to evaluate development options for the Terra Nova field, is expected to decide on whether to proceed with the project during the year. The price of West Texas Intermediate light crude oil is expected to average between US$15 and US$20 per barrel, with the upper end of the forecast range contingent upon the ability of OPEC to maintain control of production levels of all member countries in 1989. Should the current OPEC production accord weaken or fail, the decline in prices seen in the last half of 1987 and most of 1988 could re-emerge in 1989. Exploration activities are expected to continue to be constrained by low oil prices. One new well and one carryover well have been completed in 1989; the possibility exists that one additional well may be drilled during the year. At time of writing, however, no exploratory drilling was in progress.

IX. SELECTED MANUFACTURED PRODUCTS

The manufacture of products other than fish and newsprint accounted for 32.4 percent of Gross Domestic Product (GDP) in the Province's manufacturing industry during 1987 and 3.4 percent of total GDP. Employment in this component of the manufacturing industry averaged about 6,000 persons a month in 1988, an increase from 5,500 in 1987. Due to the seasonal nature of certain of these manufacturing activities, however, the number of workers who are employed by these manufacturers for some part of the year is understated by monthly average employment statistics. The table below highlights some of the products manufactured in the Province.

Many of the products manufactured are consumed within the Province, however, certain products are exported to national and international markets. Some of these manufacturing industries offer significant potential for future economic growth, particularly in relation to the development and production of offshore oil and gas. What follows is a brief discussion of selected products which are manufactured in the Province.

TABLE IX.1

SELECTED MANUFACTURED PRODUCTS
NEWFOUNDLAND AND LABRADOR, 1988

Fabricated Metal Products

- Fabricated & Structural Metal
- Boilers & Heat Exchangers
- Ornamental & Architectural Metal Products
- Machine Parts & Equipment

Wood Products

- Lumber, Rough & Dressed
- Sash, Door & Other Millwork
- Furniture & Fixtures
- Veneer & Plywoods

Transportation Equipment

- Shipbuilding & Repair
- Boatbuilding & Repair

Chemical & Chemical Products

- Industrial Inorganic Chemical Products
- Paint & Varnish (Coatings)

Food & Beverage Products

- Meat & Poultry Products
- Dairy Products
- Bakery Products
- Soft Drinks
- Breweries

Non-Metallic Mineral Products

- Cement
- Ready Mix Concrete

Leather & Allied Products

- Footwear
- Furriers

Textile Products

- Clothing

Refined Petroleum & Coal Products

Source: Standard Industrial Classification (1980) and Economic Research and Analysis Division, Cabinet Secretariat.

IX.1 Marystown Shipyard Limited

Marystown Shipyard Limited experienced a high level of activity in 1988 and near record employment, peaking at about 700 persons, was reached during the year. Work related to several contracts for new vessel construction in 1988 more than offset a lower level of maintenance and repair activity compared with that realized in 1987. Two "gill netter" vessels, which were constructed under the Fishery Products International trawler replacement program, were completed and delivered in the summer. Also under this program, work commenced on three 42 metre deep sea trawlers with delivery expected during the first half of 1989. Construction began on two middle distance trawlers in June for the Provincial Department of Fisheries, with delivery of both vessels expected by the middle of 1989. A contract to refit the Coast Guard vessel "Simcoe" was carried out during the year and completed in December. The Cow Head oil rig repair facility experienced a low level of activity in 1988, reflecting the relatively low level of offshore oil and gas exploration drilling during the year.

Considerably less activity is expected for 1989. This is a direct result of the reduction in groundfish quotas which has adversely affected all offshore harvesters, particularly Fishery Products International (FPI) given that this Company has the largest groundfish allocations. The reduction in FPI's groundfish allocation is expected to negatively impact on the Company's cash flow and its ability to finance the completion of the three remaining trawlers under the original eight vessel contract initiated in 1987. As a result, the Marystown Shipyard will complete work on vessels started in 1988, but does not have any new vessel construction confirmed for 1989. Preliminary design work on two new ferries for the Bell Island service was initiated during 1988 and construction of at least one of these ferries will proceed this year. The level of repair and maintenance activity at the Shipyard is forecast to remain unchanged from that achieved during 1988.

Offshore drilling activity is expected to decline during 1989 and, as a result, oil rig servicing at the Cow Head facility will be constrained.

In response to the Hibernia development announcement in July 1988, the Shipyard is preparing for a major upgrading and expansion which will provide the Cow Head facility with the technology required to carry out contracts relating to the construction of the Hibernia production platform. As part of its technology transfer program, Marystown Shipyard Limited formed a limited partnership in 1986 called Vinland Industries Ltd. with Moss Rosenberg Verft of Stavanger, Norway, an acknowledged world leader in the construction of offshore oil and gas production systems. Vinland Industries is currently preparing bids on various portions of the first two major contract tender calls issued in November 1988 (see Section VIII of this report), and will bid on other aspects of the production system as tenders are called. Physical completion of any contracts awarded to Vinland Industries will be undertaken in the Province at the Shipyard.

IX.2 Newfoundland Dockyard Corporation

The Newfoundland Dockyard, which was established in 1884, is a major player in the ship repair industry in the Province. The dockyard was incorporated as a subsidiary of Marine Atlantic on March 31, 1987 and its facilities now include a graving dock and syncrolift. The Dockyard provides complete ship repair service including hull repairs, sandblasting, painting and machine shop work.

The Dockyard recorded a favourable performance during 1988. Employment fluctuated between 157 and 278 persons throughout the year. This was above employment levels experienced in 1987 when the number of workers fluctuated between 141 and 268 persons. A total of 83 contracts were received during 1988 which were valued at $13.1 million. In 1987, 85 contracts were received but the value of these contracts was only $9.1 million.

One of the most significant developments at the Dockyard during 1988 was the award of a mid-life refit of the Department of Fisheries and Ocean's vessel, the Hudson. The contract is valued at $8.3 million and work is scheduled to be carried out between January and August 1989. This contract is one of the largest ever awarded to the Dockyard and with the possibility of obtaining other ship repair work during 1989, the outlook for the yard is positive.

IX.3 Albright and Wilson Americas

Albright and Wilson Americas (formerly known as ERCO), a division of TENNECO Canada Ltd., operates a plant at Long Harbour which employs about 300 persons in the manufacture of phosphorus, ferro phosphorus, silica slag aggregates and coke fines for shipment to markets around the world. The Company announced early in 1989 its intention to permanently shut down operations at the plant by the end of the year; the plant is expected to close early in August 1989. The Company believes that the plant has become technologically obsolete because of the development of new techniques for manufacturing phosphoric acid and phosphorus chemicals. The Company has made a commitment to work with employee groups, Governments and local communities in order to mitigate the economic loss to the area around the Long Harbour plant. A study of alternative uses for the site is in progress to find ways of continuing employment for some of the experienced and skilled work force at Long Harbour. Approximately 30 employees will be retained once the furnaces are shut down to clean up stored materials containing recoverable amounts of phosphorus, a process which could extend for five to ten years.

IX.4 Come By Chance Oil Refinery

The Come By Chance oil refinery was reactivated in September 1987 and is operated by Newfoundland Processing Limited, a subsidiary of Newfoundland Energy Limited. Crude oil for the refinery is imported mainly from North Sea sources, processed at Come By Chance, and exported primarily to markets in the eastern United States. The first shipment of gasoline to the United States was made in January 1988 and shipments of petroleum products to this major market have been made on a bi-weekly basis. Although only a small proportion of the refinery's output is currently consumed within the Province (2.1 percent in 1988), increased local consumption may materialize as Come By Chance Marketing, a subsidiary of Newfoundland Processing Limited, continues to investigate the possibility of establishing outlets which would market diesel fuel and gasoline in Newfoundland and Labrador.

Over 25 million barrels of crude oil were processed at the refinery during 1988 and approximately 25.4 million barrels of oil products were produced. Heavy fuel, sold as an industrial fuel, accounted for 26.8 percent of output, heating and diesel fuel accounted for 25.3 percent, gasoline accounted for 24.4 percent and jet fuel and kerosene accounted for 6.8 percent. A small amount of propane was also produced. Approximately 16.5 percent of output was in the form of heavy oils. These oils were shipped to refineries in the United States where they were further processed. Approximately 220 production workers are currently employed at the refinery.

The majority of the refurbishing work required to reactivate the Come By Chance refinery was completed by the end of September 1987 at a cost of US$20 million. Since then, the refinery has operated at approximately 70 percent of its rated throughput capacity of 100,000 barrels of crude oil per day. Work pertaining to the reactivation of the Isomax unit, which cracks heavy crude oil into lighter fuels such as gasoline and jet fuel using hydrogen, was carried out during the first nine months of 1988. The unit became operational in September, enabling the operators to increase the refinery's processing capability. Work is now planned for the reactivation of the process needed to

produce hydrogen. Increased volumes of hydrogen available for use in the Isomax Unit will enable the Isomax to reach the desired capacity and increase the production of gasoline, jet fuel and light heating fuel from the heavier oils produced by the Crude unit. There are currently about 100 persons under contract at the refinery for refurbishing and related work. Prospects for the Come By Chance oil refinery are excellent; the Company is expected to increase its operating rate to 90 percent during 1989, up from 70 percent in 1988 and processing related employment is expected to remain at 220 persons throughout the year.

X. CONSTRUCTION

The construction industry is a major component of the Province's goods producing sector. This industry accounted for 25.3 percent of Gross Domestic Product (GDP) in the goods producing sector in 1987 and about 9.4 percent of total GDP. This industry is seasonal in nature and provided full-year and part-year employment amounting to 11,000 person years in 1988. Employment in construction traditionally peaks during the summer months.

The Province's construction industry is comprised of approximately 2,300 establishments with about 90 percent of these firms employing less than 20 people. The industry can be divided into Building and Engineering construction. Building construction consists of such activities as residential (houses, apartments and other family dwellings, renovations to existing structures) and non-residential building (industrial, commercial, institutional). Engineering construction is comprised of non-residential activities such as industrial construction (other than buildings), roads and highways, and heavy construction such as hydroelectric installations, marine facilities, and so on.

The total value of permits for both residential and non-residential building construction issued by selected municipalities in the Province rose by 26.7 percent to over $203 million in 1988, with increases reported by most municipalities (see Table X.1). Widespread growth was observed in the value of residential building permits issued, with each of the six municipalities reporting increases.

Diagram X.1

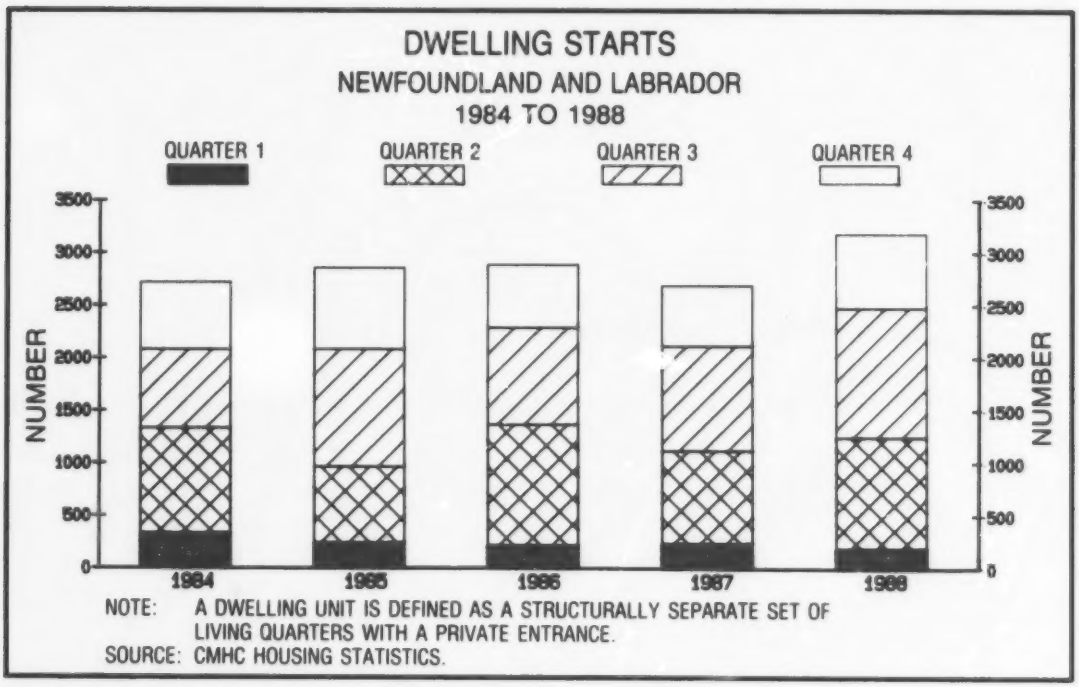


TABLE X.1

SUMMARY OF BUILDING PERMITS ISSUED AND THEIR ESTIMATED VALUE OF CONSTRUCTION, SELECTED MUNICIPALITIES, 1988

	Corner Brook		Grand Falls		Gander		Mount Pearl		Conception Bay South(1)		St. John's(2)		Total	
	1988 # Permits	1988 $ (000's)	1988 # Permits	1988 $ (000's)	1988 # Permits	1988 $ (000's)	1988 # Permits	1988 $ (000's)	1988 # Permits	1988 $ (000's)	1988 # Permits	1988 $ (000's)	1988 # Permits	1988 $ (000's)
Commercial	*	*	26	2,553 (637.8%)	54	3,885 (82.3%)	77	4,357 (-7.3%)	39	1,082 (-68.7%)	790	36,033 (25.8%)	*	*
Industrial	*	*	5	871 (-44.5%)	0	0 (n.a.)	7	3,442 (146.7%)	0	0 (n.a.)	0	0 (n.a.)	*	*
Subtotal	**103**	**5,811 (24.4%)**	**31**	**3,424 (78.7%)**	**54**	**3,885 (82.3%)**	**84**	**7,799 (28.0%)**	**39**	**1,082 (-68.7%)**	**790**	**36,033 (25.8%)**	**1,101**	**58,034 (23.7%)**
Residential	729	11,499 (34.7%)	277	4,107 (12.0%)	303	3,860 (3.4%)	609	25,485 (98.6%)	582	11,983 (52.7%)	1,982	43,922 (6.4%)	4,482	100,857 (29.5%)
Institutional and Government	6	282 (-97.0%)	2	2,120 (n.a.)	22	3,088 (303.8%)	5	278 (-96.4%)	2	10,791 (n.a.)	78	27,862 (48.0%)	115	44,421 (20.5%)
GRAND TOTAL	**838**	**17,592 (-22.4%)**	**310**	**9,651 (72.9%)**	**379**	**10,833 (63.4%)**	**698**	**33,562 (25.5%)**	**623**	**23,856 (110.9%)**	**2,850**	**107,818 (23.2%)**	**5,698**	**203,312 (26.7%)**

Notes: (1) While the number of permits reflect the total issued in each category, the estimated value includes only new building construction. Renovations, extensions, or other improvements are not included in the values provided.

(2) Figures presented here are not comparable with figures published in *The Economy 1988* as numbers and percentage changes appearing in this table reflect only activity which received City Council approval. Information published in *The Economy 1988* includes carry-over construction from previous years and construction activity which did not receive City Council approval.

The sum of the components may not equal the total due to rounding. Figures in parentheses refer to percentage change from the same time period in 1987.

n.a.: Not applicable since the value of permits in 1987 was zero.

*: Commercial and industrial are combined.

Source: City/Town Councils of Corner Brook, Grand Falls, Gander, Mount Pearl, Conception Bay South and St. John's; Economic Research and Analysis Division, Cabinet Secretariat.

The residential sector of the construction industry posted strong growth in 1988 as total housing starts increased by 18.1 percent to reach 3,168. Newfoundland and Labrador posted the second strongest growth in new residential construction in Canada during 1988; only Prince Edward Island was higher at 23.4 percent. Declines in Provincial dwelling starts in the first quarter of 1988 were more than offset by the substantial gains recorded in the remaining three quarters as starts increased by 20 percent or more in each quarter compared to the same period in the previous year.

Gains in residential construction in 1988 can be attributed to a substantial rise in the number of housing starts in both rural areas (populations of less than 10,000) and urban centers (populations of 10,000 or greater) as growth was evenly distributed. Housing starts in rural and urban areas totalled 1,458 units and 1,710 units respectively. In rural areas, dwelling completions rose by 21.5 percent while the number of units under construction at the end of December was about the same as the previous year. The number of housing units completed in urban centers increased by 8.1 percent and the average number of units under construction declined by 19.7 percent.

An increase in the number of starts was recorded for all dwelling types in 1988 as presented in Table X.2. Single detached units, which comprise the largest component of housing activity in the Province, grew by 12.2 percent to reach 2,839 units started in 1988. This represented the largest contributor to the overall increase in housing starts. The number of multiple unit structures such as semi-detached, row and apartment buildings started during 1988 was more than double the number for the previous year. The increase in multiple unit activity can primarily be attributed to Federal/Provincial assisted social housing construction. The second largest contributor to the increase in total dwelling starts in 1988 was recorded in the apartment and other category as the number of starts of these types of dwellings more than doubled over the previous year. Increases in this type of structure occurred in the Carbonear, Corner Brook and rural areas of the Province, while decreases were observed in the St. John's Metropolitan Area. These decreases can be partially attributed to a weak rental market in the St. John's area, as indicated by a high vacancy rate for non-Government apartment structures containing six units or more. The vacancy rate in October 1988 was 8.8 percent, a modest decline from a rate of 10.1 percent recorded in October 1987, but much higher than the three to four percent which is considered acceptable under normal market conditions.

TABLE X.2

HOUSING STARTS BY TYPE OF DWELLING
NEWFOUNDLAND AND LABRADOR

Dwelling Type	1987	1988	Percentage Change
Single detached	2,530	2,839	12.2
Semi-detached	72	101	40.3
Row	4	33	725.0
Apartment & Other (1)	76	195	156.6
Total	**2,682**	**3,168**	**18.1**

Notes: (1) Other includes duplexes, double-duplexes, triplexes, row-duplexes and dwellings over, or at the back of, a store or other non-residential structure.

Source: Canada Mortgage and Housing Corporation; Statistics Canada catalogue 64-002; Economic Research and Analysis Division, Cabinet Secretariat.

The non-residential component of the construction industry is an important source of investment and employment in the Province. Activity in this component of the construction industry, as indicated by real expenditures, declined during 1988. There were however, many large projects which generated substantial non-residential construction activity during 1988, as outlined in Appendix 2 - Inventory of Major Projects in Newfoundland and Labrador.

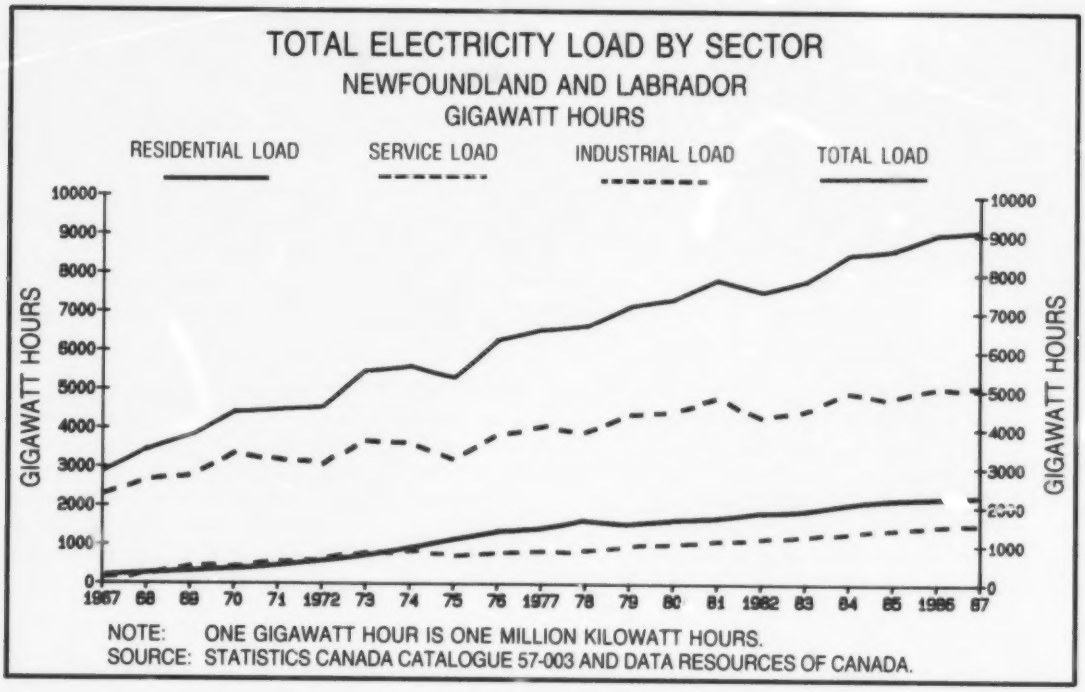
The outlook for the construction industry in 1989 is positive. A Federal/Provincial agreement will see the expenditure of additional funds on upgrading and expansion of various aspects of the Province's transportation infrastructure. As well, Canada and Newfoundland signed a "Statement of Principles" in July 1988 with members of the Hibernia consortium to proceed with the development of the Hibernia oil field. This development includes capital cost expenditures estimated at $5.2 billion during the pre-production construction phase. As a result of announcements such as these, the level of activity in the construction industry in 1989 is expected to exceed 1988 levels. An anticipated 8.1 percent increase in total investment expenditures, which includes spending on machinery and equipment, will include an increase in expenditures on construction projects. Residential construction is expected to be at par with activity in the previous year, as housing starts are forecast to approximate 1988 levels.

XI. ELECTRIC POWER

The electric power industry, which accounted for 15.6 percent of GDP in the goods producing sector and 5.8 percent of total GDP in 1987, encompasses both the production of electrical energy and its distribution to the end user. Most of the electrical output of the Province is generated by Newfoundland and Labrador Hydro, a Provincial crown corporation, which sells power directly to the Province's large industrial users such as mining companies, pulp and paper mills and the oil refinery at Come By Chance. The Company also sells power to two retailers, the Power Distribution District of Newfoundland and Labrador, a statutory corporation of the Province whose affairs are administered by Newfoundland and Labrador Hydro, and a private corporation, Newfoundland Light and Power Company Limited (NewLight). Employment in the electric power industry in 1988 was approximately 2,500 persons.

Since electricity is used as an input into the productive activities of all industries, the performance of this sector is closely linked to that of the overall economy. Electricity demand depends to a large extent on the productive activities of the mining and manufacturing industries, the stock of residential and non-residential dwellings and the trend towards increasing reliance on electricity for heating purposes.

Diagram XI.1



Total electricity load has increased considerably over the past 20 years, as is illustrated in Diagram XI.1. Historically, the industrial load has accounted for the largest proportion of the total load, however, this proportion has been decreasing over time as the residential and service sectors have grown at a faster rate than the industrial sector. The utility load (residential and service) grew at an annual average rate of 10.3 percent from 1967 to 1987 compared to the industrial load which grew at 3.9 percent over the same period.

Total Provincial load increased by 7.5 percent in 1988. Electricity consumption increased by 6.6 and 10.1 percent respectively for the Island and Labrador. Increased demand from the residential and service sectors accounted for most of the growth on the Island while the increase in Labrador was mainly attributable to the Iron Ore Company of Canada's operations in Labrador West.

Increased sales were recorded by both Newfoundland and Labrador Hydro and NewLight in 1988. The volume of electricity sold by NewLight grew by 6.7 percent due to increases in consumption of electricity by all customers. Increases in residential consumption are attributable to an increase of 2.5 percent in the number of residential customers, an increase in the number of households using electricity as their primary source of space heating and an increase in average consumption per residential customer. Growth in the service and industrial sectors can be directly attributed to the real economic growth experienced by the Provincial economy in 1988.

Electricity prices were relatively stable throughout 1988. Rates charged to residential and service customers declined slightly in the second half of 1988 while rates to industrial customers increased slightly over the same period. These changes were normal adjustments related to the Rate Stabilization Plan which was implemented by Newfoundland and Labrador Hydro in January 1986.

Capital expenditures in the electric power industry registered a large increase in 1988. Newfoundland and Labrador Hydro more than doubled its capital expenditures to $81.2 million. Major projects carried out included construction work on their head office and energy control centre in St. John's, the hydroelectric facility at Paradise River and the wood-chip generating station at Roddickton, the interconnection of Fogo and Change Islands to the Island's main electrical grid and the upgrading of Unit 1 at the Holyrood oil fired generating station. Capital expenditures at NewLight increased by 19.2 percent to $46.6 million in 1988. These expenditures included extension and reconstruction of small distribution lines throughout the Province, the installation of a new 25 kilovolt cable between Broad Cove and Bell Island and construction on a new regional office, warehouse, and service facility in St. John's.

Negotiations have been ongoing between the Province and Quebec with respect to possible development of hydroelectric sites in Labrador. Development of a hydroelectric site in Labrador would be of enormous economic benefit to the Province, enabling it to capture both the benefits of a large construction project and the benefits of a long-term stream of reliable hydro-electric power at a stable price.

Growth in the consumption of electricity is forecast for 1989 with the total Provincial load expected to increase by about 6.1 percent. Load growth can be attributed to both industrial and utility growth. With the expected start-up of Hibernia, real growth in the Province's economy is expected to continue in 1989 and to result in higher electrical demands. Growth is expected to occur in the residential sector (because of forecast higher incomes and lower unemployment levels) and in the service sector (because of expected increased demand for services, both retail and commercial). Also, expected growth in the pulp and paper industry and a higher level of production at the Hope Brook Gold Mine are expected to result in additional industrial electricity demand.

Capital expenditures in the electric power industry are expected to be sustained at a high level in 1989. Newfoundland and Labrador Hydro expects to spend approximately $91 million on capital projects. Construction will continue on the Company's new head office and energy control centre, and on generation and transmission facilities throughout the Province. Capital expenditures at NewLight are expected to increase by 19.8 percent to $55.8 million. (For more details on these and other major projects see Appendix 2.)

Newfoundland and Labrador Hydro is expected to increase its wholesale utility rates slightly in 1989. These are the rates charged to NewLight and the Power Distribution District of Newfoundland and Labrador. NewLight's electricity rates to customers are expected to remain stable in 1989.

XII. TOURISM

The Province's tourism industry has been a traditional export of the Newfoundland and Labrador service sector. The industry encompasses both resident and non-resident travellers and includes travel for business related reasons such as conventions; touring, sightseeing and outdoor sports and recreation; and visits to friends and relatives in areas throughout the Province. Tourist expenditures represent a considerable cash flow and the economic benefits of such activities flow into both rural and urban areas of the Province. Those firms which benefit most from tourist expenditures are, with the exception of the airline industry, found almost exclusively in the Services (Community, Business and Personal) and Trade (Wholesale and Retail) industries. The improved level of activity in these industries in 1988 was partly a reflection of the increased number of visitors to the Province as well as the increased level of resident tourist activity.

Table XII.1

INDUSTRIES WHICH BENEFIT FROM TOURIST EXPENDITURES

Community, Business and Personal Services	Wholesale and Retail Trade
Hotels, Motels and Tourist Clubs	Food Stores
Restaurants, Caterers and Other Food Services	Sporting Goods Stores
Camping Grounds and Travel Trailer Parks	Liquor, Wine and Beer Stores
Recreation and Vacation Camps	Gasoline Service Stations
Sports and Recreation Clubs and Services	Craft, Hobby and Souvenir Shops
Food Services	Prescription Drugs and Patent Medicine Stores
Travel Services	Clothing and Footwear Stores
Laundries and Cleaners	Florist Shops

Source: Standard Industrial Classification (1980); Economic Research and Analysis Division, Cabinet Secretariat.

The tourist industry performed well in 1988 as the gains in expenditures and other measures of activity experienced in 1987 were improved upon during the year. The total number of tourist trips in the Province was estimated at 1.46 million while total tourist expenditures reached $366.8 million, up by 4.3 and 8.3 percent respectively over 1987. The improvement in expenditures was due to the higher number of tourist trips as well as to an increase in the average expenditure per tourist.

Soiree '88 was a major contributor to the increase in the number of resident and non-resident tourist trips during 1988. This year long festival of activities celebrated the 100th year of municipal government in Newfoundland and Labrador by highlighting Provincial culture and tradition. Most of the activities were centered in the St. John's area, however, other regions of the Province also

participated in this event. Many municipal and regional special events, such as community folk festivals, became part of the Province's Soiree '88 promotional effort.

The number of people interested in visiting Newfoundland and Labrador increased in 1988, as indicated by the level of information inquiries to the Province. These inquiries can be categorized into three main types: written, telephone inquiries via either the toll-free 1-800 or the St. John's area number, and walk-in requests. In general, the bulk of written and toll-free telephone inquiries emanate from outside the Province. The total number of information inquiries to the Province grew by 32,218 during 1988, up by 39.5 percent over 1987. Written inquiries were the largest contributor to the total growth as a 61.3 percent increase was reported. This increase in written inquiries is a reflection of the growing interest in Newfoundland and Labrador as a travel destination for non-resident tourists, and can be partially attributed to the 20 percent increase in out-of-Province tourism advertising spending in 1988 by the Provincial Government.

TABLE XII.2

INFORMATION INQUIRIES
NEWFOUNDLAND AND LABRADOR, 1987 AND 1988

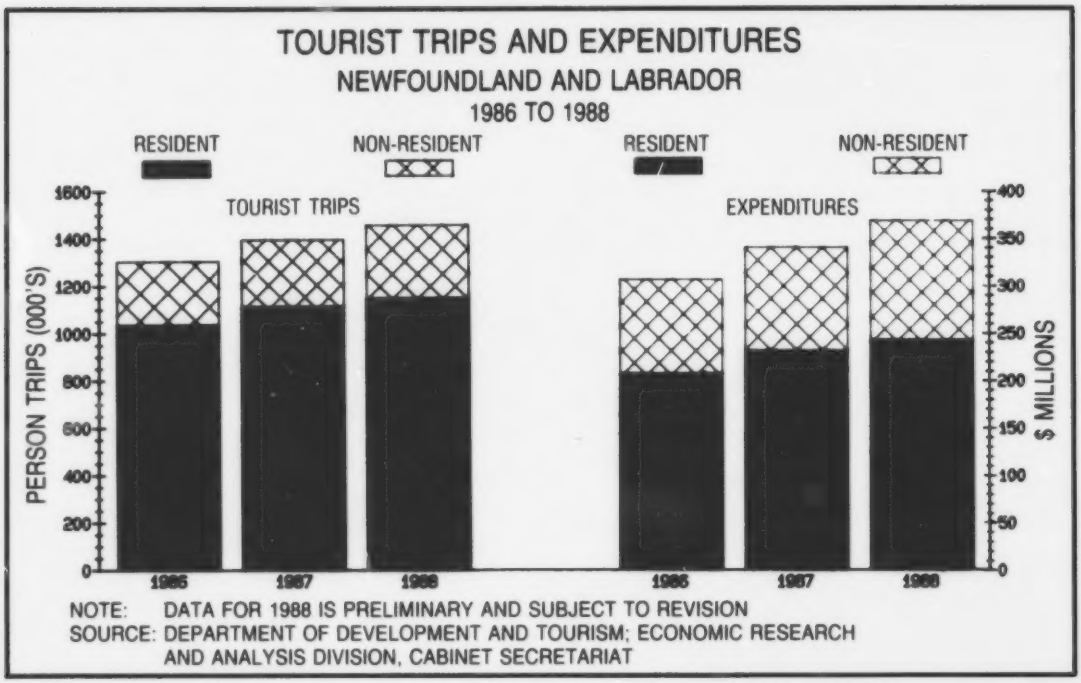
	1987	1988	% Change
Written	38,870	62,698	61.3
Telephone Inquiries			
1-800 Number	37,554	43,342	15.4
576-2830	3,688	5,873	59.2
Walk in Requests	1,388	1,805	30.0
Total Inquiries	**81,500**	**113,718**	**39.5**

Source: Visitor Services Division, Department of Development and Tourism; Economic Research and Analysis Division, Cabinet Secretariat.

The export component of the tourism industry is comprised of non-resident tourists travelling to the Province. During 1988, an estimated 308,000 non-resident tourists visited the Province and spent about $125.6 million, representing increases of about 9.2 and 15.5 percent respectively over 1987. The growth in expenditures was due to both the rise in the number of tourists visiting the Province and a 5.8 percent increase in the average non-resident tourist expenditure.

By mode of travel, tourists travelling to the Province by air were estimated at 200,000 during 1988, up by approximately 10.7 percent over 1987. This group had the highest per tourist expenditure of all tourist groups in the Province with an estimated $86.1 million spent during the year, up by 12.5 percent over 1987. Visitors arriving by air accounted for more than 65 percent of total non-resident tourists, and per tourist expenditures were about 18 percent higher than for visitors arriving by automobile. Air travellers spent approximately 72 percent of their non-transportation related tourist dollars on accommodation and restaurant meals as compared with about 58 percent for visitors arriving by automobile. In general, non-resident air travellers spend relatively more on accommodations and restaurant meals and relatively less on transportation and other goods and services than do visitors arriving by automobile.

Diagram XII.1



Residents of the Province accounted for an estimated 1.15 million tourist trips, which represented 78.8 percent of the total in 1988. Total expenditures by resident tourists amounted to $241.2 million, constituting 65.8 percent of tourist expenditures during the year. This indicates that the average tourist expenditure is, as would be expected, somewhat lower for residents than for non-residents. Nevertheless, resident tourist trips increased by 3.0 percent while corresponding expenditures grew by 4.8 percent, thus indicating that the average resident tourist expenditure increased in 1988.

The hotel/motel business benefited from the improved level of tourist activity in 1988. The higher level of both non-resident and resident tourist activity resulted in a greater number of rooms sold during the year at most major centres, as outlined in Table XII.3, with the largest increases reported in Stephenville, St. John's and Deer Lake. The increased level of activity at these locations can be attributed in part to: the return to the normal levels of hotel/motel occupancy after changes in airline scheduling in 1987 temporarily reduced passenger traffic at Stephenville; an increase in the number of rooms available to travellers in St. John's; and, the development and expansion of resorts, parks and other facilities in the vicinity of Deer Lake.

Increased tourist activity during 1988 was also reflected in a greater utilization of the Provincial Parks. During the camping season (May to September), the number of people who visited the parks reached 1.8 million, a 9.0 percent increase compared to the same period in 1987. Similarly, both the number of camping units and the number of nights spent by these camping units increased by 7.3 percent to 100,000 and 402,000 respectively.

TABLE XII.3

HOTEL-MOTEL ROOM RENTALS
NEWFOUNDLAND AND LABRADOR
JANUARY TO AUGUST 1987 AND 1988

	1987 Room Nights Sold	1988 Room Nights Sold	Percent Change
St. John's	173,714	195,474	12.5
Clarenville	15,142	14,264	-5.8
Port-aux-Basques	13,420	12,530	-6.6
Deer Lake	11,104	11,919	7.3
Corner Brook	50,157	53,232	6.1
Gander	64,790	67,738	4.6
Stephenville	11,851	13,358	12.7
Total	**340,178**	**368,515**	**8.3**

Note: Data for other major centers in the Province was not available at time of writing.

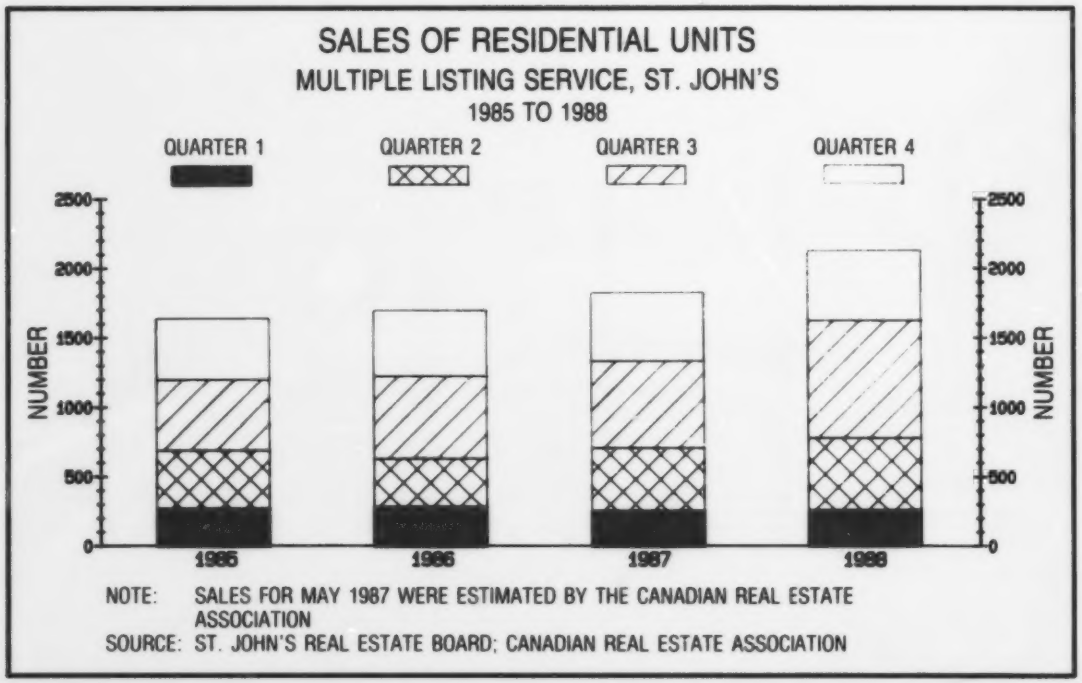
Source: Department of Development and Tourism; Economic Research and Analysis Division, Cabinet Secretariat.

The outlook for the tourism industry in Newfoundland and Labrador is positive as both tourist attractions and facilities continue to be developed and improved. The Marble Mountain Ski Resort is undergoing a multiple year, three phase improvement project aimed at increasing the number, quality and availability of ski runs and hotel accommodations. The White Hills Ski Resort opened early in 1989 and will continue to expand as additional recreation and hotel facilities are developed for year round utilization of the resort. Ongoing developments on the Great Northern Peninsula include upgrading of facilities at Gros Morne National Park, further site development and improvements to accommodations at the first known North American Viking settlement at L'Anse aux Meadows, and a general upgrading of tourist services throughout the entire "Viking Trail". An Inn is being built near the site of a sunken Basque whaling vessel in Red Bay, located in southern Labrador, which will provide additional accommodations for visitors to this unique archeological attraction. Improvements to existing operations, and the development of these and other new tourist facilities, continue to make Newfoundland and Labrador an interesting and attractive travel destination for prospective tourists. As a result, continued growth seems assured in this traditional and expanding industry.

XIII. REAL ESTATE

The positive business environment within the Province in recent years, which has been characterized by gains in both full-year and part-year employment, real growth in personal incomes and low rates of inflation, has been reflected in the increasing number of real estate transactions throughout the Province. During 1987, the most recent year for which Province-wide data is available, the number of real estate transactions totalled over 4,100, an increase of 14.3 percent compared to the previous year, while the value of sales grew by 21.6 percent to over $270 million. Increases in both the volume and value of transactions were attributable to growth in sales of both residential and non-residential property. The majority of real estate transactions, however, were related to sales of residential properties which accounted for approximately 90 percent of total sales.

Diagram XIII.1

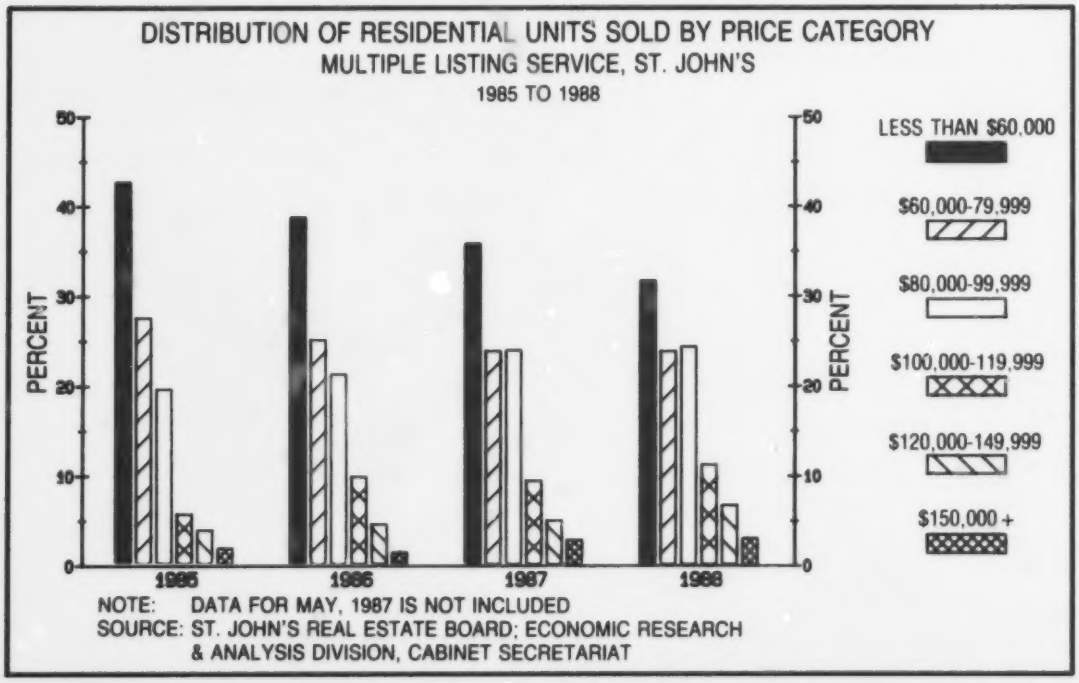


The housing market in the St. John's area is the largest in the Province and because of the City's role as a major service and distribution center, this market is a good indicator of economic activity throughout the Province. Increases in the value of residential housing sales in the St. John's area observed in 1987, as measured by Multiple Listing Service (MLS) transactions, carried forward into 1988 and improved by a further 21.5 percent to reach $164.4 million. The number of units sold in the St. John's area rose to 2,132 units in 1988, up by 16.2 percent over 1987. Increases in both the volume and value of sales occurred in each quarter of 1988 with the most pronounced growth observed in the third quarter. During this quarter, the volume and value of sales rose to 843 units and $65.8 million respectively, which represented increases of 34.7 and 43.3 percent compared to the same period in 1987.

Brisk increases in the number of residential transactions posted during the third quarter can be partially attributed to the Hibernia oil field development announcement and rising mortgage interest rates. The Federal and Provincial Governments signed a "Statement of Principles" with

members of the Hibernia consortium in July to proceed with the development of the Hibernia offshore oil field. This announcement served to stimulate home purchasing as buyers speculated that economic growth resulting from this development would increase demand in the housing market and exert upward pressure on prices. In addition to this, mortgage interest rates edged upward in the third quarter of 1988, and by the end of the year, rates were higher than those recorded in recent years. At the end of December, interest rates for one and five year term contracts were 12 percent and 12.25 percent respectively; by contrast, these rates stood at 10.25 percent and 11.75 percent at the end of December 1987. These increases contributed to the heightened sales activity in the real estate market (particularly in the third quarter) as upward movement of rates enticed prospective homeowners into purchasing homes in anticipation that further increases might occur.

Diagram XIII.2



Sales of residential units in the upper end of the housing market have accounted for a larger share of total sales in recent years, while the percentage share of units priced below $80,000 has declined. In 1988, 44.8 percent of total sales were accounted for by properties priced above $80,000 compared with 40.7 percent in the previous year and 36.6 percent in 1986. By contrast, sales of properties priced below $80,000 accounted for 55.2 percent of all residential units sold during 1988, a decline from 59.3 and 63.4 percent recorded in 1987 and 1986 respectively.

Several factors have favoured the upper end of the housing market in recent years. Price increases for most houses costing more than $80,000 have been moderate when compared to those priced below $80,000. This factor, when combined with relatively strong growth in personal in-comes, has made units in the upper end of the market more attainable.

Improved demand for residential real estate was reflected not only in a higher volume of housing sales, but also in the strengthening of prices for most housing types in the one year period ending October 1988 (see Table XIII.1). Price increases in this period can be primarily attributed to price gains observed between April and October 1988, which offset price declines that occurred between October 1987 and April 1988. The exception to this price trend was luxury condominiums

for which prices in October declined compared to the same month in 1987. Condominiums, however, comprise only a small share of the total market. In the one year period ending October 1988, price increases ranged from 1.5 percent for a standard two-storey home in Mount Pearl to 6.5 percent for a standard townhouse in the St. John's - West End.

TABLE XIII.1

HOUSE PRICES

House Type	Selling Price October 1987	Selling Price October 1988	Percent Change October 1987 to October 1988	Percent Change October 1987 to January 1988	Percent Change January 1988 to April 1988	Percent Change April 1988 to July 1988	Percent Change July 1988 to October 1988
Standard Townhouse							
St. John's - East End	53,000	54,200	+2.2	0.0	-2.5	+0.6	+4.2
St. John's - West End	49,100	52,300	+6.5	-0.2	+0.4	+2.2	+4.0
Mount Pearl	48,600	50,500	+3.9	-1.4	+1.5	+0.4	+3.5
Detached Bungalow							
St. John's - East End	92,500	95,300	+3.0	-0.1	-1.5	+2.7	+1.9
St. John's - West End	88,500	92,900	+4.9	-0.3	-0.1	+3.9	+1.5
Mount Pearl	87,600	90,600	+3.4	-2.7	-0.5	+5.5	+1.2
Standard Condominium Apt.							
St. John's - East End	99,500	101,800	+2.3	-3.0	-0.2	+3.3	+2.3
Standard Two-Storey							
St. John's - East End	118,000	119,900	+1.6	-2.5	0.0	+3.0	+1.2
St. John's - West End	114,800	117,000	+1.9	-0.3	-0.1	+1.9	+0.4
Mount Pearl	109,800	111,500	+1.5	-3.3	+0.2	+3.4	+1.4
Executive Detached Two-Storey							
St. John's - East End	133,500	136,700	+2.4	-1.6	-0.3	+1.9	+2.4
St. John's - West End	124,700	128,200	+2.8	+0.2	+0.1	+0.7	+1.7
Mount Pearl	118,000	120,400	+2.0	-0.8	-0.4	+1.7	+1.6
Luxury Condominium Apt.							
St. John's - East End	165,500	162,800	-1.6	-2.7	-0.4	-1.7	+3.2

Note: All properties have been considered as free of debt. Percentage calculations for October to January, January to April, April to July and July to October are based upon rounded data.

Source: Royal LePage Survey of Canadian House Prices; Economic Research and Analysis Division, Cabinet Secretariat.

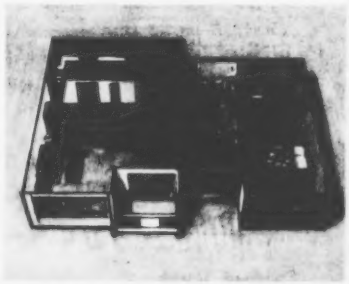
Glossary of Housing Types

Detached Bungalow

A detached, three-bedroom single-storey home with 1½ bathrooms and a one-car garage. It has a full basement but no recreation room, fireplace or appliances. Using outside dimensions (excluding garage), the total area of the house is 111 sq. metres (1,200 sq. ft.) and it is situated on a full-serviced, 511 sq. metre (5,500 sq. ft.) lot. Depending on the area, the construction style may be brick, wood, aluminum siding, or stucco.

Standard Two-Storey

A three-bedroom, two-storey home with a detached garage. It has a full basement but no recreation room. Using outside dimensions, the total area of the house is 139 sq. metres (1,500 sq. ft.) and it is situated on a fully-serviced, city-sized lot of approximately 325 sq. metres (3,500 sq. ft.). The house may be detached or semi-detached and construction style may be brick, wood, aluminum siding, or stucco.



Standard Condominium Apartment

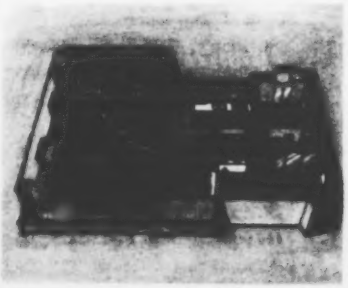
A two-bedroom apartment comprising a living room, a dining room (possibly combined) and a kitchen, in a high-rise building with an inside floor area of 84 sq. metres (900 sq. ft.). Amenities include standard broadloom, 1½ bathrooms, 2 appliances, a small balcony and 1 underground parking space. Common area includes a pool and some minor recreational facilities.

Executive Detached Two-Storey

A detached two-storey, four-bedroom home with 2½ bathrooms, a main floor family room, one fireplace, and an attached two-car garage. There is a full basement but no recreation room or appliances. Using the exterior dimensions (excluding garage), the total area of the house is 186 sq. metres (2,000 sq. ft.), and it is situated on a fully-serviced, 604 sq. metre (6,500 sq. ft.) lot. Depending on the area, the construction style may be brick, wood, aluminum siding, stucco, or a combination like brick and aluminum.

Standard Townhouse

Either condominium or freehold, the townhouse (rowhouse) has three bedrooms, a living room and dining room (possibly combined) and a kitchen. Also included are 1½ bathrooms, standard broadloom, a one-car garage, a full unfinished basement and two appliances. Total inside area is 92 sq. metres (1,000 sq. ft.). Depending on the area, the construction may be brick, wood, aluminum siding or stucco.



Luxury Condominium Apartment

A two-bedroom apartment comprising a living room, a dining room (possibly combined), and a kitchen, with a family room or den, in a high-rise building with an inside floor area of 130 sq. metres (1,400 sq. ft.). Amenities include upgraded broadloom, 2 full bathrooms, ensuite laundry and storage areas, 5 appliances, a large balcony and 1 underground parking space. Common area includes a pool, sauna and other major recreational facilities.

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Moderate price growth in the aggregate housing market, which is composed mainly of houses being offered for resale, can limit price increases received by contractors for new houses placed on the market. The new housing price index, which measures changes in the contractors' total selling price of new residential houses (in terms of both land and structure prices separately and combined), advanced by 2.3 percent in 1988. The index remained stable during the first quarter of 1988 but began to edge upward in May, a trend which continued throughout the rest of the year. Strongest growth was recorded in the house component which mainly relates to the current cost of the structure. This index advanced by 2.6 percent during 1988 while the land component index advanced by 1.8 percent.

The outlook for the real estate industry in 1989 is positive with growth expected to continue albeit at a slower pace compared to the performance of 1988. The main factors behind the expected increase are forecast growth in both full-year and part-year employment and personal income, as well as a favourable real estate investment environment resulting from preparations for the anticipated development of the Hibernia oil field.

XIV. TRANSPORTATION

The transportation industry accounted for an estimated 8.2 percent of GDP in the Province's service sector in 1987 and about 5.2 percent of total GDP. This industry is labour intensive, as discussed in Section II, and includes the activities of firms and agencies which provide transportation services within and outside the Province. The services provided by this industry include air, water, road and rail (Labrador only) transport, all of which are fundamental and essential to the functioning of the economy. The industry facilitates the movement of large volumes of freight to, from and within the Province. This is particularly critical for Newfoundland and Labrador since the bulk of the output of the primary and secondary industries such as fish products, newsprint and iron ore are exported while large volumes of consumer goods are imported. The industry also provides for the transportation of individuals within the Province, as well as to and from the Province.

TABLE XIV.1

TRANSPORTATION INDUSTRY INDICATORS NEWFOUNDLAND AND LABRADOR, 1987 AND 1988

	1987	1988	% Change
Airline Passenger Travel (1)			
Number of Passengers Boarding	498,488	554,051	11.1
Number of Passengers Deplaning	486,996	542,149	11.3
Terra Transport Roadcruiser Bus Service (2)			
Number of Passengers	177,015	173,939	-1.7
Marine Atlantic Traffic (3)			
Number of Passengers	356,506	377,975	6.0
Passenger Related Vehicles	106,187	114,960	8.3
Number of Containers	23,623	16,932	-28.3
St. John's Waterborne Cargo (4)			
Cargo (Tonnes)			
Bulk Cargo	443,332	468,933	5.8
Containerized General Cargo	309,004	333,769	8.0
Other General Cargo	114,067	141,980	24.5

Notes: 1. Includes Wabush, Churchill Falls, Goose Bay, St. John's, Gander, Deer Lake, Stephenville; Data for period January to November; Airlines include Air Canada, Canadian Airlines International, Air Nova and Air Atlantic.
2. Data includes only inter-city and rural bus travel and does not include charters, tours and sightseeing services.
3. Includes traffic in both directions for the Port-Aux-Basques-North Sydney and Argentia-North Sydney ferry service.
4. Includes Port of St. John's traffic only.

Source: Department of Development and Tourism; Terra Transport; Marine Atlantic; Ports Canada; Economic Research and Analysis Division, Cabinet Secretariat.

The passenger transportation aspect of the industry continued to grow in 1988. Four major airlines serve the Province and the total number of passengers boarding and deplaning flights at the Province's seven largest airports reached almost 1.1 million during the first 11 months of 1988, an increase of 11.2 percent over the same period in 1987. Gains were observed at all seven airports, however, St. John's and Deer Lake, the two busiest passenger airports, experienced the largest increases at 12.3 and 11.8 percent respectively; traffic at the Stephenville airport grew by 3.8 percent. Higher levels of resident and non-resident tourist travel during 1988 contributed to increased passenger air travel.

The increased level of tourist activity in 1988 also stimulated increased passenger travel on inter-provincial ferry routes. The volume of passenger traffic on Marine Atlantic's ferry service between the Province and North Sydney continued to increase in 1988. The total number of passengers carried was up by 6.0 percent compared to 1987 and the total number of passenger related vehicles carried increased by 8.3 percent. A large part of the improvement would appear to be related to the increased number of non-resident tourists visiting the Province by automobile.

The number of passengers travelling by bus within the Province dropped to just under 174,000 in 1988, a decline of 1.7 percent from the previous year. This is a continuation of a downward trend which began in 1984. Several factors have contributed to these declines including increased competition from airlines which offer more frequent flights to more destinations within the Province and improved retail shopping services in smaller centres which has reduced the need for some individuals to travel.

Major changes in the Province's transportation industry in 1988 will have an influence on the future development of freight handling in the Province. The closure of the Island railway, which took place in the fall of 1988 under the terms of a Federal/Provincial agreement, will mean a significant increase in the amount of freight carried by other modes of transport. For example, rail transport of cargo between Port aux Basques and St. John's, including intermediate destinations, can be displaced to a large extent by waterborne cargo transported to St. John's and Corner Brook by private carriers for distribution at these centres, or for further shipment to intermediate destinations. As well, the utilization of multi-modal containerized freight, initiated at the beginning of the decade by Terra Transport, should continue to expand in the future.

Increased activity in most of the Province's goods and service producing industries during 1988 served to stimulate activity in the transportation industry. The number of commercial vehicles using Marine Atlantic's ferry service between the Province and North Sydney increased by 10.9 percent during 1988 when compared to the previous year. The phase out of the Province's Island railway, however, led to a decline in the number of containers handled to 16,932, a decrease of 28.3 percent from 1987. Some of this container traffic is now being shipped by rail from points west to Halifax and from there to St. John's by ocean-going commercial container vessels while some is being shipped through the port of Montreal to either St. John's or Corner Brook. The port of St. John's experienced an increase of 9.0 percent in the total volume of waterborne cargo handled in 1988. The number of containers passing through the port, as measured by Total Equivalent Units (20 foot long containers) increased by 15.9 percent to reach almost 74,000 during the year. A new container service commenced operations between Montreal and Corner Brook during the year and nearly 2,900 containers passed through the port. Shipping traffic, as measured by the number of ships using the port, reached 240 vessels during 1988, an increase of 55.8 percent over the previous year.

The outlook for the transportation industry during 1989 is positive. Real growth is expected in most goods and service producing industries during the year and this should provide further stimulus to both the passenger and freight transportation aspects of the industry. Marine Atlantic

will take delivery of their second super ferry, the MV Joseph and Clara Smallwood, late in 1989. This will provide the means to accommodate future passenger growth on the Gulf ferry service expected to result from continued expansion of the tourism industry; the first super ferry, the MV Caribou, commenced service on the Gulf in 1986. The port of St. John's is anticipating further growth in container traffic during the year as the existing services will be enhanced by additional container carrying vessels. The port of St. John's redevelopment program, started in 1984, will be completed in 1989 thus improving vessel handling capabilities. The port of Corner Brook is undergoing a three year revitalization program which commenced in 1988. The revitalization will include upgrading of the container terminal to accommodate anticipated future increases in this mode of freight. The future of the transportation industry in the Province is promising as the industry changes to meet increased demands by both commercial and domestic users.

XV. EMPLOYMENT AND THE LABOUR FORCE

Employment in Newfoundland and Labrador increased by 10,000 on a monthly average basis in 1988, marking the third consecutive year of employment gains in the Province. The 5.5 percent growth in employment, which consisted of both full-year and seasonal employment growth, was the highest recorded for any Canadian province and led to a decline of 1.5 percentage points in the Province's unemployment rate to 16.4 percent. Labour market performance in 1988 represented a continuation of the rising employment and falling unemployment rates that have characterized the Province's labour markets during the period since 1985 following a slow recovery from the 1981/82 recession.

The increase in both full-year and seasonal employment in the Province during 1988 was met with an increase in the number of workers in Provincial labour markets. This was reflected in a rising participation rate in 1988 which caused the labour force to grow by 8,000 on a monthly average basis. The expansion of the work force offset much of the 10,000 person year gain in employment and hence tempered the fall in the unemployment rate. It is likely that many of the new entrants to the Province's labour force in 1988 joined the ranks of the employed for some part of the year rather than the unemployed while, at the same time, it is likely that some of those who had previously been unemployed also succeeded in finding some employment. This is suggested by the fact that monthly average employment increased by 10,000 in 1988, exceeding the increase in the labour force by 2,000.

Statistics Canada defines full-time employment as employment that "consists of persons that usually work 30 hours or more per week and those that usually work less than 30 hours per week but consider themselves to be employed full time". A majority (more than 80 percent) of the increase in employment during 1988 accrued to persons in full-time employment. The balance was accounted for by gains in part-time employment. Furthermore, about 89.1 percent of total 1988 employment in the Province, as measured in person years, was accounted for by persons working full-time; the remainder was accounted for by persons working part-time. This compares with only 84.6 percent of employment in Canada accounted for by persons working full-time in 1988. Since 1985, employment in the Province, as measured in person years, has increased by a total of 19,000; most of this increase (about 16,000 person years) consisted of full-time employment.

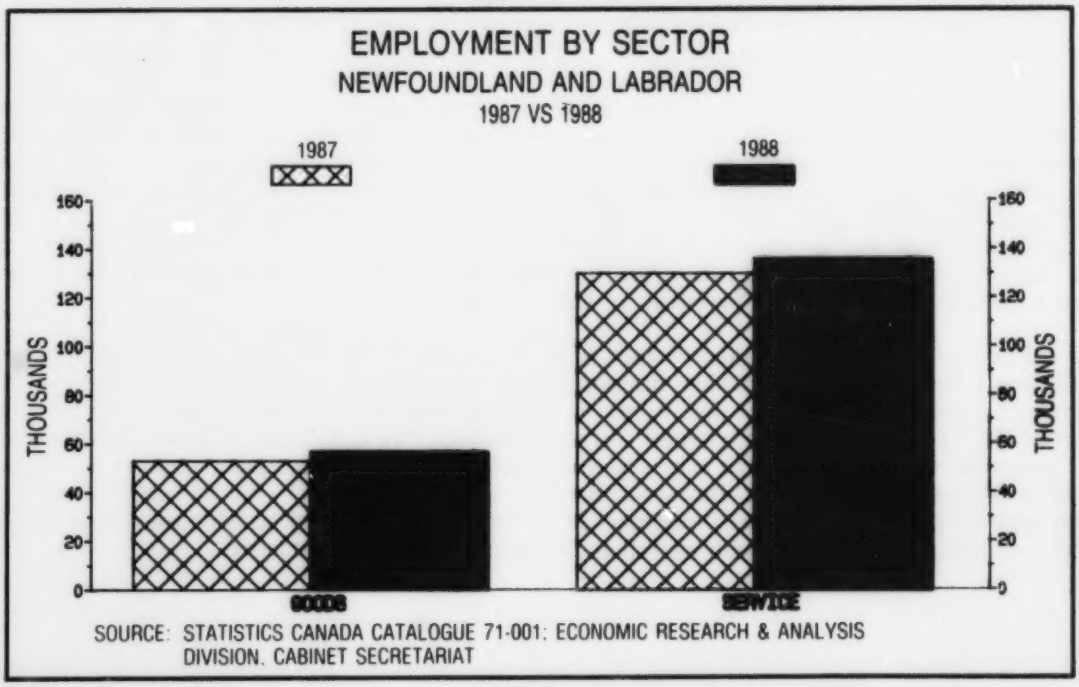
Whereas the distinction between *full-time* and *part-time* employment rests on the number of hours usually worked per week, the distinction between *full-year* and *part-year* employment rests on the length of time a person has been continuously employed. In other words, full-year employment refers to employment which lasted for at least the full 12 months of any given year. About 64 percent of all employment in the Province during 1988, as measured in person years, consisted of persons working full-year; this compares with about 72 percent in Canada and reflects the somewhat greater reliance on seasonal, or part-year, employment in this Province. Furthermore, much of the employment growth in 1988 was accounted for not only by growth in full-time employment, but also by growth in full-year employment. A majority (about 60 percent) of the increase in employment during 1988 accrued to persons who were employed full-year. The balance was accounted for by gains in part-year, or seasonal, employment.

While most of the additional employment generated in the Province since 1985 has been full-time employment, the growing importance of seasonal, or part-year, employment in the Province is witnessed by the fact that more than three-quarters of the 19,000 increase in employment since 1985 was accounted for by persons working part-year. The increasing importance of seasonal, or part-year, employment in the past few years accounts for the increasing number of workers qualifying for Unemployment Insurance Benefits and is consistent with the concentration of employment gains over the past three years in seasonal industries such as Manufacturing (mainly fish processing) and Construction as well as in Trade and Services industries.

Gains in both full-year and part-year employment last year were shared equally between males and females throughout the Province. Monthly average employment for males rose by about 5,000 in 1988. Since growth in employment for males exceeded growth in the male labour force, the average number of unemployed males in the Province fell causing the unemployment rate for males to fall from 16.8 percent to 15.2 percent. The employment to population ratio for males edged up to 54.4 percent from 52.7 percent in the previous year. Monthly average employment for females also rose by about 5,000 in 1988, offsetting an increase of about 5,000 in the monthly average size of the female labour force. The increase in employment resulted in a fall in the female unemployment rate from 19.6 percent in 1987 to 18.2 percent last year. The employment to population ratio for females increased correspondingly from 34.8 percent to 37.1 percent. The lower employment to population ratio for females as compared to males indicates that considerable potential remains for rising female participation and substantial labour force growth, a trend that has characterized Provincial labour markets for some years.

Statistics for different regions of the Province (see Map XV.1) indicate that labour market performance varied throughout the Province. Historically, unemployment rates in rural areas of the Province have been higher than in the Province's larger centres because of the rural concentration of seasonal occupations and employment. Last year, although the unemployment rates remained relatively high in most rural areas, all regions either recorded employment gains or maintained the employment levels achieved in 1987. Rising labour force participation, accompanied by rising levels of employment, characterized the entire Avalon region. Considerable employment growth was recorded in both the St. John's Census Metropolitan Area (CMA) as well as in surrounding rural areas precipitating a decline in the region's unemployment rate. The unemployment rate in the St. John's CMA fell to 11.3 percent, the lowest rate in the Province and a decrease of 1.2 percentage points from the rate recorded in 1987. For the Avalon Peninsula as a whole, the rate fell to 13.8 percent, a decline of 1.4 percentage points from the previous year. The North Eastern area of the Province (Area 040) also experienced positive labour force performance in 1988 as employment rose by approximately 4,000. In spite of the additional employment generated, however, increasing labour force participation caused the unemployment rate to remain at about the same level as in 1987. On the South Coast (Area 020) and the West Coast and Labrador (Area 030) the level of labour market activity was essentially unchanged from 1987.

Diagram XV.1



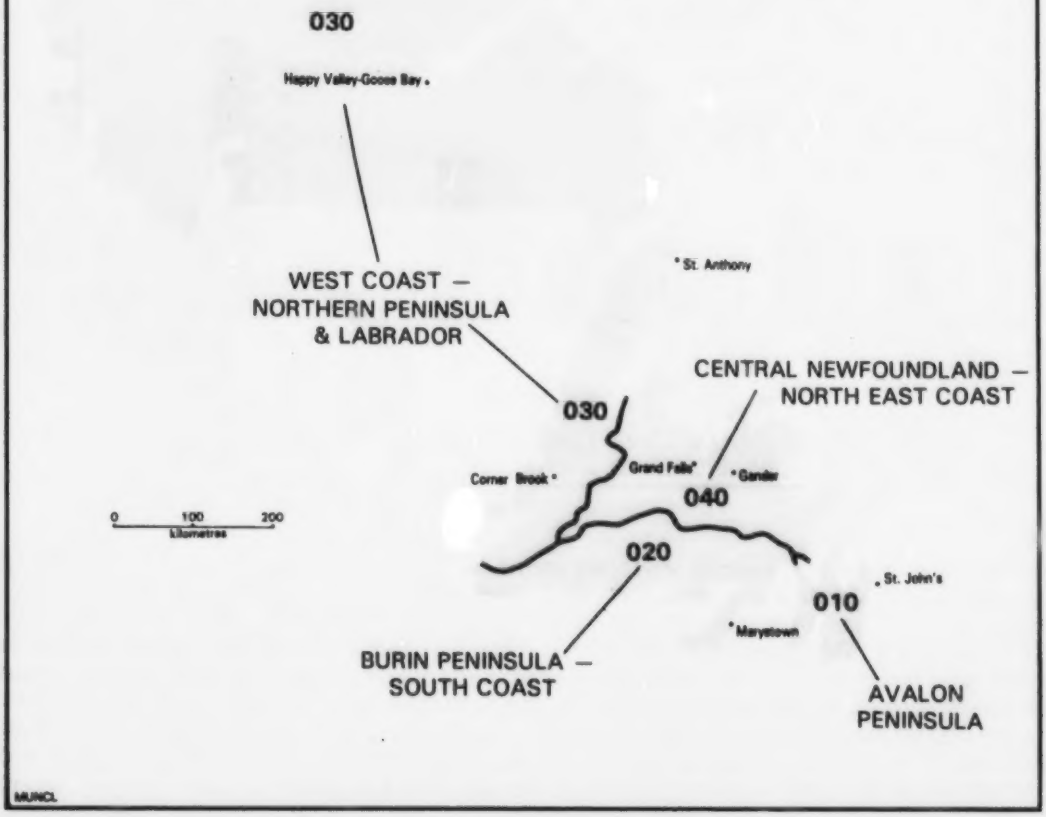
SOURCE: STATISTICS CANADA CATALOGUE 71-001; ECONOMIC RESEARCH & ANALYSIS DIVISION, CABINET SECRETARIAT

Map XV.1

Labour Force by Statistical Area in Newfoundland and Labrador 1988 Annual Average ('000)

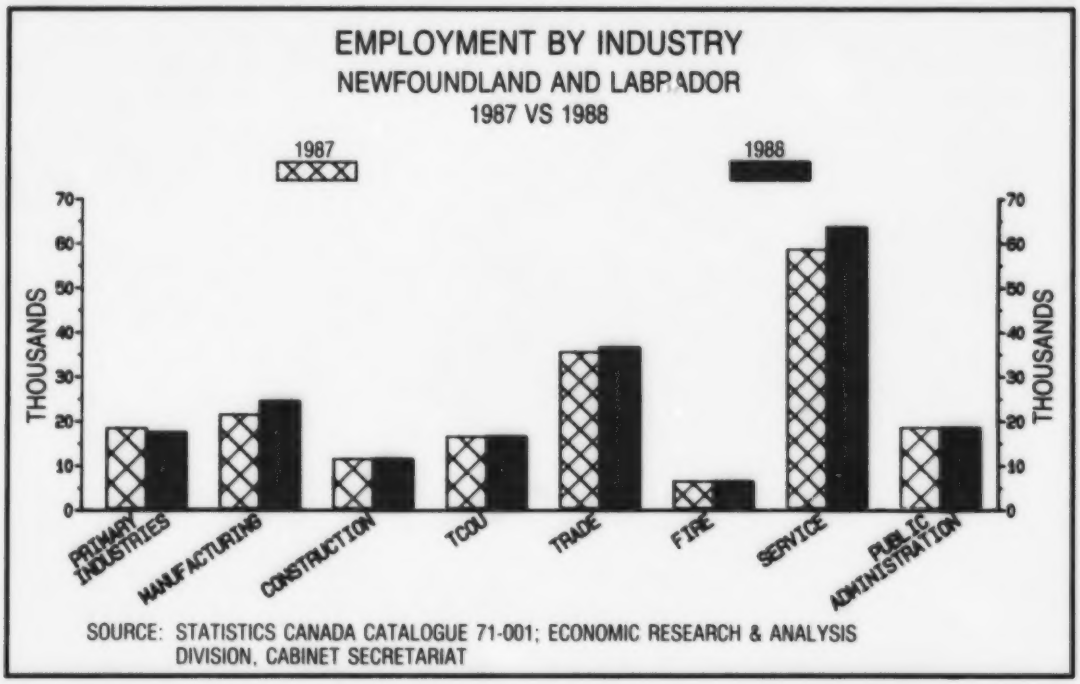
	Labour Force	Population Labour Force Age
Area 010	110	186
Area 020	20	41
Area 030	53	94
Area 040	49	103

Source: Statistics Canada 71-529



The Provincial economy can be divided into two main sectors, the goods producing sector and the service producing sector. Industries in the goods producing sector include primary industries such as agriculture, logging and fish harvesting as well as the mining and construction industries. Employment in the goods producing sector generally accounts for about 30 percent of total employment in the Province; the relatively small share of employment, as measured in person years, accounted for by this sector is partially explained by the fact that many of the jobs provided by the goods producing industries are seasonal in nature. The remaining 70 percent of total employment is accounted for by the service sector. Industries included in the service producing sector include Transportation, Communication and other Utilities; Wholesale and Retail Trade services throughout the Province; Finance, Insurance and Real Estate services; Community, Business and Personal services, a large percentage of which is accounted for by education, health and welfare services; and services provided by the municipal, provincial and federal governments (Public Administration). Diagram XV.1 shows that both sectors of the Provincial economy benefited from the strong economic performance throughout 1988; employment in the goods producing sector increased by 7.5 percent in 1988 and employment in the service producing sector increased by 4.6 percent.

Diagram XV.2

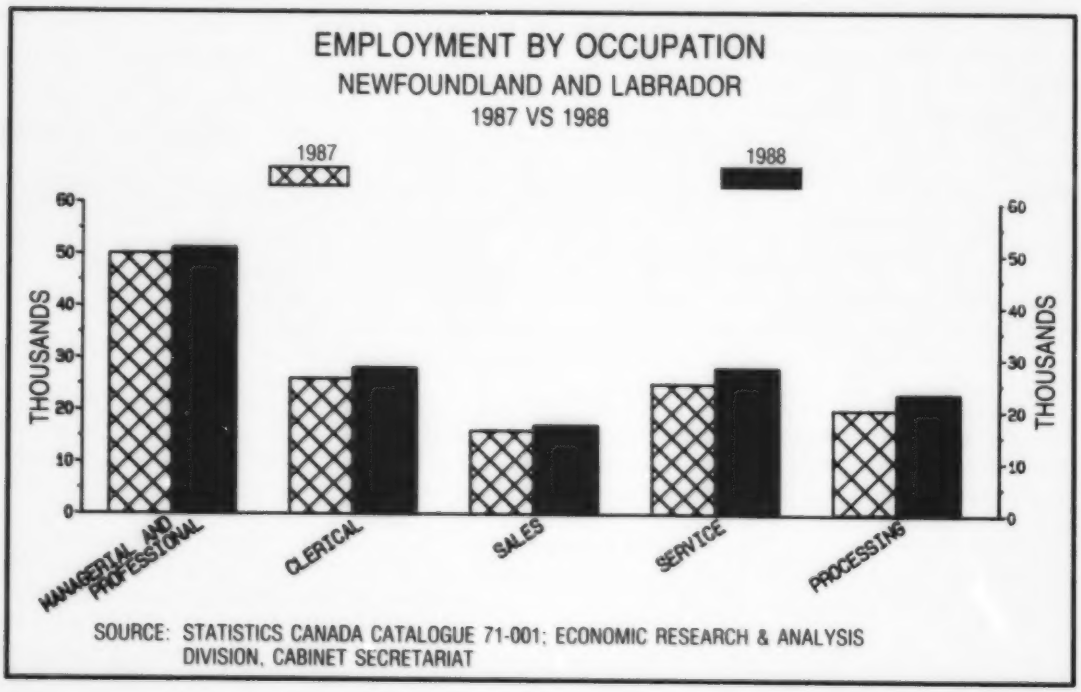


Employment gains in the goods producing sector during 1988 stemmed largely from the strength of the Manufacturing industry. Employment in this industry, which is dominated by fish processing, increased by more than 14 percent in 1988 with virtually all of the gains accruing to males. Since fish processing is a highly seasonal activity, it is likely that much of this employment growth was part-year. The successful harvest of pelagic species, particularly capelin, in 1988 was a key factor in the increased level of fish processing employment. Employment in other industries within the goods producing sector was fairly stable in 1988 compared to 1987. Employment growth during 1988 in the service sector, which is labour intensive and generally distributed throughout most regions of the Province, was primarily attributable to continued expansion of the Trade and Services industries in both urban and rural parts of the Province. Both of these industries have experienced

exceptionally high levels of activity in recent years. Employment in Trade during 1988 increased by nearly three percent with virtually all of the gains accruing to females. Employment in the Service industries (Community, Business and Personal Services) increased by nearly nine percent with the gains distributed between males and females. Employment losses for males in Public Administration were fully offset by employment gains for females leaving employment in this industry unchanged. Changes in the level of employment for each industry, from 1987 to 1988, are depicted in Diagram XV.2.

A large proportion of employment in the Trade and Service industries is typically accounted for by clerical, sales and service occupations whereas the dominant occupation in the manufacturing industry is generally processing. Managerial and professional occupations are found in all industries, however, there is a heavier concentration of these occupations in the Service industries. The strong Provincial economy throughout 1988, together with the increased spending on the part of both consumers and businesses, contributed to the continued growth of both the Trade and Services industries. While many of the service industries tend to be concentrated in urban parts of the Province, the Trade, and to a lesser extent, Services, industry are important employers in rural parts of the Province. The increased demand for occupations such as clerical, sales and service, which are broadly based throughout the Province, was a contributing factor to the successful job search activities of many workers in rural labour markets and to the rising levels of employment and declining unemployment rates evident throughout the Province in 1988. The consistency between trends in employment by industry and by occupation is demonstrated in Diagram XV.3.

Diagram XV.3



Overall, labour market performance was positive in 1988. Both the labour force and employment rose, benefiting male and female workers in both urban and rural parts of the Province. Participation rates and the employment/population ratio rose while the unemployment rate declined in most regions of the Province.

Continued, though weaker, improvement is expected during 1989 in both the level of full-year and seasonal employment in the Province and the unemployment rate. The year began on an optimistic note and in the first four months of 1989, the monthly average number of people employed was up by four percent compared with the monthly average for the first four months of 1988. On the same basis, the unemployment rate declined by 2.4 percentage points. By year end, the monthly average level of employment in the Province is expected to rise by at least 4,000 while the unemployment rate could fall to 15.7 percent as a result of strength in some Provincial industries. This will represent the fourth consecutive year of sustained employment growth and declines in the Province's unemployment rate.

XVI. CONCLUSION

The past year was marked by improvement in the Provincial economy as most industries recorded real growth. Real Gross Domestic Product (GDP) grew by an estimated 3.8 percent, the strongest growth recorded since 1984. The 5.5 percent growth in employment consisted of both full-year and seasonal employment growth and led to a decline in the Province's unemployment rate to 16.4 percent. The growth in both full-year and seasonal employment contributed to gains in personal income although benefits were also realized from real increases in average weekly wages. Growth of 15.4 percent in Unemployment Insurance benefits was a contributor to the increase in personal income in 1988. This large increase in Unemployment Insurance benefits is related to the growth of seasonal employment that meant more people were eligible for benefits. The gains in personal income as well as growth in tourism activity contributed to growth in the value of retail trade which is at historically high levels. The Province's export industries benefited from continued expansion of the international, and in particular, the United States economy.

Prices for cod products in the United States were lower on average during 1988 and this translated into lower cod prices paid to fishermen, however, this was offset by higher prices for certain other species (particularly capelin) and a higher volume of fish landings overall compared to the previous year. In total, the value of landings is estimated to have risen by 5.4 percent over the level recorded during 1987. The inshore/nearshore fishing sector associated with the Northern Cod Stock had its best year since 1983, following several years of low catches. The forestry industry was hampered by a six week strike at the Corner Brook pulp and paper mill which affected newsprint shipments, however, the value of newsprint shipments slightly exceeded the value in the previous year and sawmill production was at the highest level achieved since the 1940s. The mining industry benefited from a full year's production at mining operations located at Daniel's Harbour and St. Lawrence. As well, growth in both the production and shipment of iron ore, which accounts for about 85 percent of the Province's mining output, was in part, related to the high level of demand in the industry's markets. The Province's service industries also experienced real growth during 1988 as they continued to benefit from the growth in the goods producing industries.

While there was continued economic growth in 1988, a number of difficult and unsolved problems remain. The unemployment rate declined in 1988, however, unemployment levels in the Province continue to be high by any standard of comparison and seasonal employment continued its upward trend, resulting in a growing dependency on Unemployment Insurance payments. The problems faced by the labour intensive inshore fishery in some areas of the Province continue and reduced fish quotas present problems to policy makers and the industry alike. Furthermore, growth of the public sector is restrained at both levels of Government by sizeable budget deficits.

Nevertheless, real economic growth is expected in the short term. Real GDP is expected to expand by 2.3 percent and to be accompanied by growth in both full-year and part-year employment. The international economy, and especially the United States, is expected to experience real economic growth again in 1989 and this will translate into growth in the demand for resource based products. The outlook for the Province's fishing industry in 1989 is for lower groundfish landings, and hence lower employment in fish processing, because of reduced offshore quotas. The potential to mitigate, but certainly not offset, the effects of the reduced quotas will depend primarily on the success of the inshore/nearshore fleets and on increased utilization of formerly underutilized species. The five year pulp and paper mill modernization program is proceeding on schedule and the resulting gains in efficiency, productive capacity and product quality will ensure the long term viability of the Province's forest industry. The mining industry, and particularly the iron ore industry, has undergone a period of rationalization throughout the 1980s and the gains in productivity and efficiency achieved have improved the industry's competitive position. Furthermore, the signing of the "Statement of Principles" concerning the Hibernia development and of a major Federal/Provincial transportation agreement has enhanced the investment climate in the Province and could serve to increase Gross Domestic Product growth. Overall, the outlook is for continuing improvement in 1989 as growth in the goods producing sector continues to provide stimulus for the Province's service industries.

Appendix 1

STATISTICAL INDICATORS OF NEWFOUNDLAND AND LABRADOR

TABLE 1.1

GROSS DOMESTIC PRODUCT AT FACTOR COST BY INDUSTRY NEWFOUNDLAND AND LABRADOR: 1987

	Gross Domestic Product	
	$Millions	Percent of Total
Primary	**737.0**	**11.4**
Agriculture	22.0	0.3
Forestry	55.0	0.9
Mining, Quarries & Oil Wells	455.0	7.0
Fishing and Trapping	205.0	3.2
Manufacturing	**680.0**	**10.5**
Fish Products	330.0	5.1
Pulp and Paper Products	130.0	2.0
Other Manufactured Products	220.0	3.4
Construction	610.0	9.4
Electric Power & Water Utilities	384.0	5.9
Sub-total: Goods Producing	**2411.0**	**37.3**
Transportation, Communications & Other Utilities	555.0	8.6
Trade	700.0	10.8
Finance, Insurance & Real Estate	575.0	8.9
Community, Business & Personal Services	1490.0	23.1
Public Administration	725.0	11.2
Sub-total: Service Producing	**4045.0**	**62.7**
TOTAL: ALL INDUSTRIES	**6456.0**	**100.0**
Residual Error of Estimate*	(74.0)	
TOTAL GDP AT FACTOR COST	**6382.0**	

Notes: * When GDP is calculated on an industry basis, the total for all industries does not equal total GDP. The difference is known as a residual error of estimate.

Parentheses refer to a negative value.

Source: Cabinet Secretariat (estimate).

TABLE 1.2

EMPLOYMENT BY INDUSTRY
NEWFOUNDLAND AND LABRADOR: 1988

	Employment	
	Thousands	Percent of Total
Primary	**19.0**	**9.8**
Agriculture	1.1	0.6
Forestry	1.4	0.7
Mining, Quarries & Oil Wells	3.4	1.8
Fishing and Trapping	12.0	6.2
Manufacturing	**24.0**	**12.4**
Fish Products	10.3	5.3
Pulp and Paper Products	2.3	1.2
Other Manufactured Products	6.0	3.1
Construction	11.0	5.7
Sub-total: Goods Producing	**57.0**	**29.5**
Transportation, Communications & Other Utilities	16.0	8.3
Trade	36.0	18.7
Finance, Insurance & Real Estate	6.0	3.1
Community, Business & Personal Services	63.0	32.6
Public Administration	18.0	9.3
Sub-total: Service Producing	**136.0**	**70.5**
TOTAL: ALL INDUSTRIES	**193.0**	**100.0**

Notes: Totals in the goods and service producing industries do not add due to independent rounding of individual industries. Components in some goods producing industries do not add to the total for the industry as sources of the data differ by industry.

Percentages may not add to 100 due to independent rounding.

Source: Statistics Canada; Newfoundland Statistics Agency and Economic Research and Analysis Division, Cabinet Secretariat.

TABLE 1.3

SELECTED ECONOMIC INDICATORS
NEWFOUNDLAND AND LABRADOR: 1985 - 1989

	1985	1986	1987	1988	1989f
Gross Domestic Product at factor cost					
(millions of current $)	5,586	5,924	6,382	6,895	7,364
% change - Current $	4.5	6.1	7.7	8.0	6.8
Gross Domestic Product at factor cost					
(millions of constant $)	4,644	4,677	4,831	5,013	5,155
% change - Constant $	3.4	0.7	3.3	3.8	2.8
Personal Income					
(millions of current $)	6,107	6,501	7,044	7,678	8,217
% change - Current $	6.0	6.5	8.4	9.0	7.0
% change - Constant $	1.8	3.4	5.3	6.5	3.9
Retail Trade					
(millions of current $)	2,254	2,407	2,755	3,074	3,290
% change - Current $	8.8	6.8	14.5	11.6	7.0
% change - Constant $	4.5	3.7	11.2	9.0	3.9
Gross investment					
(millions of current $)	2,459	2,576	2,456	2,537	2,743
% change - Current $	5.9	4.7	-4.7	3.3	8.1
% change - Constant $	3.0	2.3	-7.4	2.3	5.0
Labour Force (000's)					
Annual Average	220	221	223	231	234
% change	0.9	0.5	0.9	3.6	1.4
Employment (000's)					
Annual Average	174	179	183	193	197
% change	0.0	2.9	2.2	5.5	2.3
Unemployment Rate (%)					
Annual Average	20.8	19.2	17.9	16.4	15.7
St. John's Consumer Price Index (1981 = 100)					
Annual Average	127.8	131.6	135.4	138.6	143.0
% change	4.2	3.0	2.9	2.4	3.1

Notes: In some cases, the percentage change may be calculated using unrounded numbers. Some data for 1985 to 1988 is preliminary.

f: forecast

Source: Statistics Canada; Newfoundland Statistics Agency and Economic Research and Analysis Division, Cabinet Secretariat.

Appendix 2

AN INVENTORY OF MAJOR PROJECTS

NEWFOUNDLAND AND LABRADOR

Appendix 2

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Agnes Pratt Home - Extension	St. John's	8.8	1987/1989	136 new beds will be added, some of which will be replacements.
Aircraft Maintenance & Repair Centre and Office Building	St. John's	2.5	1988/1989	New centre will house Air Atlantic's maintenance engineering group as well as their marketing and administrative team. This project will receive a $546,000 contribution from the Atlantic Canada Opportunities Agency (ACOA).
Airport Inn	Gander	1.6	1988/1989	Construction of a new hotel on the existing site began two months after the original hotel was destroyed by fire. The new hotel will contain 26 efficiency housekeeping units and 40 double rooms. The hotel is expected to be fully operational by the summer of 1989.
Airstrip	Grand Falls	1.9	1989/1990	Federal funds, with the Provincial Government responsible for maintenance.
Airstrip	Clarenville	2.3	1989/1990	Federal funds, with the Provincial Government responsible for maintenance.
Airstrip	Fogo Island	2.8	1988/1989	Approximately $0.7 million will be spent for the upgrading of the facility. Federal funds, with the Provincial Government responsible for maintenance.
Airstrip	St. Andrews	1.8	1989/1990	Federal funds, with the Provincial Government responsible for maintenance.
Air Terminal Building	Deer Lake	6.5	1988/1990	Approximately $4.3 million will be spent in 1989/1990 for a new terminal building.
Asbestos Processing Plant	Baie Verte	15.0	1988/1989	Construction of a new asbestos processing plant at Baie Verte Mines Inc. that will use an innovative state-of-the-art "wet" milling operation. The project will include the construction of the mill, the purchase of machinery and equipment and the development of a new water supply system. A portion of the cost of this project is funded by a Federal contribution of approximately $7 million through ACOA.
Automobile Dealership Building	Mount Pearl	5.5	1988/1989	Construction of a new dealership building by Regatta Ford will contain approximately 61,000 square feet.
Boat Building Facility	Argentia	1.0	1989	Modern Marine Industries will construct fiberglass boats using glass reinforced polyester planking and moldless technology. The project will receive financial assistance of approximately $487,000 from ACOA.
Bridges and Causeways	Various Locations	2.5	1989/1990	Various projects. Provincial funds.
Canada/Newfoundland Offshore Petroleum Board - Core Storage Facility	St. John's	1.3	1988/1989	Facility will store geophysical records and geological and hydrocarbon samples from the Newfoundland offshore area.
Canadian Coast Guard Sub-base	Stephenville	3.1	1988/1989	Construction of a building on the wharf facility to accommodate Coast Guard personnel and equipment. Federal funds.
Central Newfoundland Health Centre Redevelopment	Grand Falls	23.9	1986/1989	Provincial funds.
Cod Farming Facilities	St. Lunaire - Griquet, Crouse, Bay Bulls, Harricott, Baine Harbour	2.3	1988/1989	SeaForest Plantation Company Limited will establish five cod farming facilities around the Island that will raise small sized trap fish to a more marketable and higher value product. This project will receive financial assistance of $1.1 million from ACOA.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Cold Storage and Freezer Facility	Argentia	4.2	1988/1989	A new 30,000 square foot cold storage and freezer facility with the capacity to hold 15.8 million pounds of product will be constructed by Argentia Freezers & Terminals Limited with the assistance of a $1.7 million contribution from ACOA. The Company will use the facility to hold large volumes of underutilized fish species, such as herring and mackerel.
Combined Services Building - Stephenville Airport	Stephenville	3.5	1988/1991	New building will house a garage, trade shops and associated equipment, materials and the airport's crash fire rescue resources. Project is in preliminary design stage. Federal funds.
Community College Expansion	Various Locations	11.8	1988/1990	Expansion and renovations associated with the new Community College System. Provincial funds.
Community Health Centre	Roddickton	3.5	1989/1991	Approximately $400,000 was spent on design planning and site development in 1988/89. Entails the replacement of existing community health centre. Provincial funds.
Confederation Building - East Block Renovations	St. John's	32.3	1986/1992	Renovations to existing offices and House of Assembly. Provincial funds.
Container Terminal	Corner Brook	17.0	1988/1990	Work on the project began in August 1988 and is presently 25% complete. The scheduled completion date is June 1990.
Courthouse	Grand Falls	2.2	1988/1990	Provincial and private funds.
Dept. of National Defence - Goose Bay Airport	Goose Bay	85.9	1987/1994	Joint program of Department of National Defence, Transport Canada and Public Works Canada. Southside of airport will be upgraded for use as a Canadian Forces Base. The north side of the airport is to become civilian at a cost of $24 million from 1987/1992 by Transport Canada. Funding will provide for upgraded roads, buildings, runways, main operating areas and fuel and water systems.
Development of Marble Mountain Resort	Steady Brook	4.2	1988/1989	Project includes the purchase and installation of a four seat chair lift and snowmaking equipment, the purchase of a snow groomer, slope grooming and construction, and construction of a maintenance building. Approximately 55% of expenditures include machinery and equipment. Phase 1 of a $50.2 million three phase development plan. Funding for the project include contributions from the Tourism Development Subsidiary Agreement, from ACOA and the Canada/Newfoundland Planning Agreement.
Development of White Hills Resort	Clarenville	6.5	1988/1990	Project includes construction of a 110 room hotel, development of a second ski hill and will provide activities such as windsurfing, sailing, tennis, canoeing, hiking, horseback riding and fishing. This project will receive a $4.2 million contribution from ACOA.
Economic and Regional Development Agreement (ERDA) on Highway Development and the Newfoundland Transportation Initiative Enrichment of ERDA.	Various Locations	286.0	1985/1992	The earlier ERDA agreement provided $186 million by the Federal and Provincial Governments for upgrading of the Trans-Canada Highway, regional trunk and access roads, and for work on the Trans-Labrador Highway. The enrichment of ERDA expenditure consists of an additional $100 million which is a component of the Newfoundland Transportation Initiative, an agreement concerning the phasing out of the railway in Newfoundland. The additional $100 million will be spent on regional trunk roads and the Trans-Labrador Highway. ERDA is cost-shared 62.5% Federal and 37.5% Provincial.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Environmental Improvements Project	Grand Falls	10.0	1989/1992	Abitibi-Price Grand Falls will make environmental improvements to the pulp and paper mill. Program will reduce suspended solids in discharge to Exploits River, improve effluent monitoring system, assess air pollution discharge and review waste management system. Private funds.
Fire Hall	Mount Pearl	1.4	1988/1989	Scheduled for completion by September of 1989. Capital cost includes building construction only. Municipal funds.
Fish Plant	Makkovik	4.8	1988/1991	Preliminary design and engineering work was completed during fiscal year 1988/89 with the reconstruction of the existing plant to take place over the next two years. Funded under ERDA for Inshore Fisheries. 70% Federal, 30% Provincial funds.
Fish Plant	Nain	2.5	1988/1990	Preliminary design and engineering work was completed in the fiscal year 1988/1989. Construction work will take place during the next year. Plans call for the upgrading and expansion of existing plant. Funded under ERDA for Inshore Fisheries. 70% Federal, 30% Provincial funds.
Fish Processing Plant - Modernization Program	Valleyfield	5.2	1989/1990	Beothic Fish Processors Limited will make structural changes to the plant and purchase $2.4 million of machinery and equipment to modernize the facility. Project will receive a $2.6 million contribution from ACOA.
Fisher Institute Expansion	Corner Brook	1.5	1989/1990	Project scope under review. Approximately $1.5 million has ben budgeted for 1989/1990. Provincial funds.
Forest Resource Roads	Various Locations	2.1	1989/1990	Provides access roads for silviculture work primarily under the Forest Resource Development Agreement. 70% Federal, 30% Provincial funds.
Freight Shed	Goose Bay	1.4	1988/1989	Department of National Defence project at the Goose Bay Airport. Cost includes demolition of five existing sheds, and erection of a new freight shed.
General Airport Repairs	St. John's	2.0	1988/1989	Includes the rehabilitation of airport terminal building, apron and taxiway G. Resurfacing taxiways and apron in the general aviation area. Rehabilitate runway 02/20 and taxiways F and D.
General Services Building	St. John's	5.6	1988/1989	This project will provide a common building to house marine, aviation and weather forecasting services. These expenditures are part of the airport master plan formulated in 1984 and expected to continue until the year 2000. Plans call for the building of a new air/terminal building. Total cost of the airport master plan is estimated at $100 million.
German Air Force - Facilities Construction and Upgrade	Goose Bay	38.5	1987/1990	Expenditures include the construction of the German Air Force Hangar 5 at a cost of $35 million, renovation of Hangars 4 & 6, renovation of B478 Social Club and renovation of B273 operational workshops.
Glynmill Inn - Expansion and Modernization	Corner Brook	3.8	1988/1990	Includes the addition of 30 new guest rooms and the renovation of older rooms, an expansion of the convention and banquet facility to accommodate up to 400 guests, the addition of a swimming pool and fitness centre, installation of a new heating system and the construction of a parking area. The project will receive approximately $2 million in financial assistance from ACOA.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Golf Course	St. John's	2.4	1989/1991	Construction of an 18 hole golf course by the Thomas Development Corporation will be aided by ACOA with funding in the order of $1,150,000 and an interest buy-down valued at $297,000. The golf course is expected to be fully functional by the spring of 1991.
Governor's Park	Salmonier Line	6.9	1988/1989	Will include the training of personnel in the hospitality industry and the construction of a resort including recreational facilities, campsites and hotel. Provincial, Federal and private funds.
Gros Morne National Park	Great Northern Peninsula	6.4	1988/1990	Work includes the erection of a new $3.9 million recreational complex to be located approximately 3 kms. north of Rocky Harbour. Other capital expenditures include general park upkeep, campground enhancements, ski trail and hiking trail development, bridge and road work.
Hibernia Offshore Oil Field Development - Statement of Principles.	Various Locations	8,500.0	1989/2012	The expenditures listed for this development include the construction and installation of production and storage facilities, subsea equipment, shuttle tankers and development drilling. Capital cost breakdown is as follows: pre-production construction phase $5.2 billion (extending from 1989/1995); production phase $3.3 billion (extending from 1995/2012). Expenditures are expected to start around the fourth quarter of 1989 and production is estimated to begin in 1995. The construction phase will include the construction of a combined Gravity Based Structure (GBS) graving dock and main support frame assembly site in the Come By Chance area at a total cost of $135 million which is supported by a $95 million contribution from the Canada/Newfoundland Offshore Development Fund. Assembly and final outfitting of the main support frame will take place in the Province. The Government of Canada will contribute 25 percent of the pre-production capital costs to a maximum of $1 billion and guarantee loans for 40 percent of the costs to a maximum of $1.6 billion, together with other measures designed to reduce risks of default of the guaranteed loan. The Government of Newfoundland and Labrador will remove the retail sales tax on project capital costs and will provide $11 million to the project for specific engineering activities in the Province.
High Technology Demonstration Fish Plant	Fermeuse	1.5	1988/1989	The project involves the integration of all commercially ready technologies of the Fisheries Technology Group of St. John's in a fish processing plant operated by Universal Multifoods Limited. Establishment of the demonstration plant will be funded with the help of a $1.1 million contribution from ACOA (70%) and the Provincial Government (30%). Funds are provided under the Canada/Newfoundland Ocean Industry Development Subsidiary Agreement.
Highway Improvement and Construction	Various Locations	18.8	1989/1990	A variety of projects undertaken by the Province. Provincial funds.
Hotel	Clarenville	5.0	1988/1989	Hotel will contain 65 rooms, dining room, lounge, banquet facility and outdoor pool. Project will be constructed with the help of a $1.6 million contribution from ACOA.
Hotel	Port aux Basques	3.2	1989/1990	Hotel will contain 60 rooms, dining room, meeting rooms, lounge, exercise room, sauna and whirlpool facilities. Project will be constructed with the help of a $1.3 million contribution from ACOA.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Industrial Infrastructure Planning	Argentia and Adams Head/Come By Chance	1.3	1987/1989	Pre-engineering and design work related to the possible Hibernia development sites of Argentia (major steel fabrication yard) and Adams Head/Come By Chance (gravity based system construction facility). 75% Federal, 25% Provincial funds.
Industrial Mall Complex	Pasadena	1.0	1989	Expansion of the Venture Centre industrial incubator mall complex by the Pasadena Economic Development Committee with the assistance of an $850,000 contribution from ACOA.
Labrador Airport Programs	Labrador Communities	4.4	1988/1989	General restoration, equipment shelters, runways and installation of lights. Federal funds.
Labrador Pulpwood Harvesting Operation	Goose Bay	1.8	1988/1989	Eastern Wood Harvesters, a company involved in the harvest and export of pulpwood from the Province, is expanding and improving its harvesting technology. They will acquire mechanized harvesting equipment to be deployed in operations in the vicinity of Goose Bay. The project is funded in part by a contribution of $625,050 from ACOA.
Limestone Quarry	Lower Cove	28.0	1988/1989	Entails the establishment of a mining, processing and crushing facility as well as construction of a deep water shipping facility by Newfoundland Resources and Mining Company Limited. Approximately $1.9 million of the total cost of the project is supported by the Federal Government under the Atlantic Enterprise Program. This program is now included in the operations of ACOA.
Marine Facilities Repair and Maintenance Projects	Various Locations	3.5	1989/1990	These projects will involve the repair and maintenance of various marine facilities, such as sheds, wharves, breakwaters and minor re-dredging. Federal funds.
Marine Service Centre Program	Various Locations	17.0	1988/1992	Improvements to some marine service centres have already been made through acquisitions of heavy equipment for some centres. Improvements to others will continue under the program while new marine service centres will be constructed at various ports in the Province. Funded under ERDA for Inshore Fisheries. 70% Federal, 30% Provincial funds.
Memorial University of Newfoundland - Centre for Earth Resources Research	St. John's	25.0	1987/1989	The 135,000 square foot building (classrooms and laboratory) will house the Earth Science Resource Centre at Memorial University. 75% Federal, 25% Provincial funds.
Memorial University of Newfoundland - Centre for Offshore and Remote Medicine and Telemedicine	St. John's	2.7	1987/1989	This project involves the construction of a new facility on the campus of Memorial University which will contain a hyperbaric medicine facility and other offshore related medical equipment. 75% Federal, 25% Provincial funds.
Motor Vehicle Registration Building	Mount Pearl	8.5	1987/1989	Provincial funds.
National Research Council's Institute of Marine Dynamics - Wave Generating System	St. John's	10.6	1987/1990	Construction and installation of a wave generator at the National Research Council's Institute of Marine Dynamics. The National Research Council has committed $7.07 million for the project with the remaining $3.5 million funded through the Offshore Development Fund.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Newfoundland and Labrador Housing Corporation - Housing and Development	Various Locations	118.6	1989/1990	These expenditures relate to the Corporation's capital expenditure activities of which many programs are cost-shared on a 75/25 Federal/Provincial basis with NLHC's Federal counterpart Canada Mortgage and Housing Corporation (CMHC). The budget includes spending for the Rural and Native Housing Program, the Non-Profit Housing Program, the Residential Rehabilitation Assistance Program (RRAP), Residential Land Assemblies, Industrial Land Development, modernization of the Corporation's rental portfolio, and the construction of housing for clients with special needs.
Newfoundland and Labrador Hydro - Generation Related	Paradise River, Roddickton, Holyrood and Bay D'Espoir	76.5	1987/1990	These projects include construction of an 8 megawatt (mw) hydroelectric facility at Paradise River on the Burin Peninsula, a 5 mw wood-chip generating station and associated transmission facilities at Roddickton, uprating of Units 1 and 2 at the Holyrood oil fired generating station from 150 mw to 175 mw each and dyke work on the Bay D'Espoir reservoir system.
Newfoundland and Labrador Hydro - Head Office and Control Centre	St. John's	40.0	1987/1990	The project includes the construction of a 150,000 square foot office building. This facility will house the head office of the Hydro Group of Companies as well as the Energy Control Centre. Approximately 50% of the total cost is related to the Energy Control Centre.
Newfoundland and Labrador Hydro - New Service Building	Bishop's Falls	2.8	1988/1989	The new service building will contain 1,125 square metres of sheltered work space and will replace the existing facility which was constructed as a munitions storage depot many years ago. The building will house the transmission, terminal, civil works department and maintenance garage.
Newfoundland and Labrador Hydro - Staff House/Mess Hall Complex	Churchill Falls	3.0	1989/1990	The new complex will replace facilities which have been in use since the initial construction associated with Churchill Falls development.
Newfoundland and Labrador Hydro - Transmission Related	Various Locations	47.0	1988/1990	Includes continued construction of 138 kilovolt (kv) line connecting the Sunnyside station to the Salt Pond substation near Burin, the extension of the 138 kv line from Berry Hill to Daniel's Harbour on the Great Northern Peninsula and construction of a 138 kv line from Seal Cove to Brent's Cove.
Newfoundland and Labrador Institute of Fisheries and Marine Technology - Marine Offshore Simulator Training Centre	St. John's	12.0	1987/1991	Centre will include a full-mission ship's bridge simulator as well as a ballast control simulator. 75% Federal, 25% Provincial funds.
Newfoundland and Labrador Youth Centre	Eastern Region	11.9	1988/1992	The centre will be constructed in two phases. Phase 1 includes the construction of an administrative core building and housing facilities for 30 youths. Phase 2 consists of the construction of housing facilities for 50 youths and will begin when Phase 1 is completed. Provincial funds.
Newfoundland Light & Power Co. Limited - Capital Expenditures	Various Locations	55.8	1989	Includes construction of a new regional office, warehouse and service facility for St. John's, improvements to computer systems and upgrading of an extension to the transmission and distribution system.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Newfoundland Telephone - Capital Expenditure Program	Various Locations	85.6	1989	These expenditures will occur at a number of exchange and radio locations, providing the telephone sets, outside plant cable, exchange and circuit equipment for local and long distance calling. Expenditures will also provide for the modernization of the telephone network and the introduction of new business and residence services resulting from the integration of Terra Nova Tel. Approximately 65% will be spent on machinery, equipment and supplier engineering and installation. The remaining 35% will be spent on engineering and installation provided by Newfoundland Telephone.
Newfoundland Transportation Initiative	Various Locations	648.1	1989/2003	These expenditures are components of the Newfoundland Transportation Initiative, an agreement concerning the phasing out of the railway in Newfoundland. Expenditures designed to upgrade and improve the Province's transportation infrastructure include the following: (1) $405 million to be spent between 1990 and 2003 on a major upgrading of the Trans-Canada Highway, (2) $235 million to be spent on regional trunk roads over the period 1991 to 2003, (3) $8.1 million to be spent for port improvements to St. John's and Argentia. Federal funds.
Offshore Fabrication Capabilities Enhancement	Marystown	20.0	1990/1991	A sum of $20 million has ben tentatively approved under the Offshore Development Fund for an offshore fabrication enhancement program at Marystown Shipyard. Specifically, the program is comprised of three activities including: management training; engineering and design of new facilities; and construction of new facilities. The program is premised on maximum utilization of existing facilities at the Shipyard and modest improvements to infrastructure at the oil rig repair facility at Cow Head.
Offshore Survival Centre	Little Soldiers Pond, Foxtrap	5.0	1987/1990	This project includes the development of a fire ground and complex, with training facilities. Completion is scheduled for spring, 1990. 75% Federal, 25% Provincial funds.
Paint Manufacturing Firm - Expansion and Modernization	St. John's	4.0	1988/1989	Expansion and modernization of the distribution centre and manufacturing plant by Standard Manufacturing Company Limited with the assistance of an $885,000 contribution from ACOA.
Petroleum Technology Training Program	Various Locations	21.1	1987/1991	Upgrade existing post-secondary technology training facilities and establish new programs and training facilities related to the offshore petroleum industry. 75% Federal, 25% Provincial funds.
Placentia Flood Control Measures	Placentia	2.0	1989	This project involves the elevation of two roads and the extension of a wave wall as flood control measures. Federal, Provincial and Muncipal funding.
Printing and Publishing Plant	St. John's	6.0	1988/1989	Robinson-Blackmore Printing and Publishing Limited will construct a 38,000 square foot building, purchase new equipment and machinery and upgrade the Company's existing equipment. This project will receive financial assistance of approximately $2.9 million from ACOA.
Protein Hydrolosate Plant	Marystown	12.0	1989/1990	Fishery Products International Limited through a joint venture with a French company will establish a state-of-the-art fish meal plant adjacent to its fresh fish processing plant in Mooring Cove. The plant will produce a high-quality fish protein concentrate for feed in agriculture and aquaculture.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Pulp & Paper Mill Modernization Program	Corner Brook	300.0	1985/1990	Involves the installation of new production equipment and improved production processes at Corner Brook Pulp and Paper. The Federal and Provincial governments will contribute $45.6 million of the total cost, with the balance paid by the Company. As of December 31, 1988, approximately $201 million had been spent on the program.
Pulp and Paper Mill - Paper Machine Conversion	Corner Brook	19.5	1988/1991	Corner Brook Pulp and Paper Ltd. will convert the No. 4 newsprint machine to produce specialty grade paper, the type which is used for advertising inserts in newspapers. The Company will invest $13.6 million, while ACOA will contribute a further $5.8 million. An additional 25 jobs will be created at the mill as a result of the conversion.
Quidi Vidi/Rennies River Development	Long Pond to Quidi Vidi Lake	5.0	1985/1995	The implementation of the Quidi Vidi/Rennies River Development Foundation's 10 year Development Plan continues on schedule. The major projects to be undertaken in 1989 include the construction of the Newfoundland Freshwater Resource Centre. Linear Park development along Rennie's river and around Quidi Vidi Lake will continue and plans include a well defined training program. Federal, Provincial and Municipal funding is anticipated by the Foundation as well as corporate and private fundraising.
Reconstruction and Modification of Ferry Dock	Argentia	5.0	1988/1989	Marine Atlantic will make improvements to the present docking facility to permit the berthing of MV Joseph and Clara Smallwood. Project includes extending the existing pier, construction of an extension to the wharf to allow the mooring of large vessels, installation of a new two-lane transfer bridge and lifting mechanism, and provision of associated lighting, water supply and other ship's services.
Regatta Plaza	St. John's	10.0	1988/1989	Shopping mall and office space.
Resurfacing Runway	Gander	2.8	1989	Will involve the resurfacing of runways 13/31 and 04/22.
Road and Bridge Rehabilitation	Various Locations	8.7	1989/1990	Various projects. Provincial funds.
Ropewalk Place	St. John's	3.5	1987/1989	Phase II of a two phase 70,000 square foot shopping mall scheduled to be completed by September 1989.
Royal Air Force - Facilities Upgrading	Goose Bay	3.4	1987/1990	Expenditures include ramp repairs, renovation of B1071 explosive storage area, extension of engine bay Hangar 8, resurfacing of various areas and construction of a fire escape for Hangar 8.
Royal Canadian Mounted Police - Capital Construction Program	Various Locations	2.9	1989/1990	Aside from completing a large number of projects from the 1988/1989 program, these expenditures relate to projects which the RCMP intends to start in this fiscal year. This program consists of expenditures on the St. John's Airport and Bay D'Espoir detachments, Port Saunders and Burgeo married quarters and a Hopedale duplex.
Royal Canadian Mounted Police - New Head Quarters Building	St. John's	25.0	1988/1989	Building will have 14,000 square metres of space and will be designed to meet the RCMP's anticipated increase in members. Federal funds.
Royal Netherlands Air Force - Facilities Upgrading	Goose Bay	1.3	1987/1990	Expenditures include renovations of Barrack Block 311 and construction of commanding officer's residence.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Samaritan Place	Gander	25.0	1989/1992	Complex is being designed for retired couples and will be dedicated to the memory of the soldiers of the 101st Airborne Division of the United States Army. Complex will contain 200 apartments, a 50 bed convalescent care unit and sports facilities. Funded by Gander-Masonic Memorial Complex Inc. and by private fund raising activity.
Sawmill	Glenwood	5.0	1988/1989	A. L. Stuckless Ltd. is constructing a new modern sawmill, which will help maintain approximately 200 direct jobs in the harvesting, transportation and processing of logs for local markets. The project received $500,000 in loan guarantees from the Province and $465,000 contribution from ACOA.
School Construction	Various Locations	27.0	1989/1990	Provincial funds.
Senior Citizen Homes	Various Locations	5.3	1988/1989	Funding by the Private Non-Profit Housing Program of the Newfoundland and Labrador Housing Corporation. Scheduled for completion in August 1989.
Shrimp Processing Plant	L'anse au Loup	2.9	1988/1989	Project includes construction of a building and purchase of equipment and machinery to process shrimp. Plant will be owned and operated by the Labrador Fishermen's Union Shrimp Company Limited. Project will receive a $1.6 million contribution from ACOA.
Sir Humphrey Gilbert Building	St. John's	11.0	1988/1990	Restoration of both the exterior and interior of the building. Also new mechanical and electrical systems will be installed. Federal funds.
Small Craft Harbour Revitalization Program	Various Locations	35.0	1987/1990	Construction of wharves, breakwaters and slipways throughout the Province. Approximately $17.4 million will be spent in 1988/1989. Federal funds.
Soft Drink Bottling Facility - Expansion	St. John's	3.4	1988/1989	Expansion by Browning Harvey Limited of existing building and the purchase of machinery and equipment. Project received a $0.8 million contribution from ACOA.
St. George's Recreational Centre.	St. George's	1.5	1987/1989	Centre will include recreational ice surface, bowling lanes and lounge space. Some Provincial funding.
St. John's City Hall Annex	St. John's	3.5	1988/1989	New 25,000 square foot facility will house the City Library, the Department of Building and Development, the City's Solicitor's office and tourism and personnel offices. Municipal funds.
St. John's Port Corporation - Main Terminal Redevelopment Program	St. John's	9.6	1984/1989	This redevelopment program consists of three phases. Phases I & II have been completed at a cost of approximately $8.5 million. Phase I involved the removal of sheds and buildings, the installation of water mains and security lights and general surface repairs. Phase II consisted of the complete removal of asphalt/concrete paving and replacement with a new asphalt surface. Phase III will consist of the construction of a new marine fendering system around all wharf faces. Phase III began in 1988 and will be completed in mid-1989. Total funding by the St. John's Port Corporation.
Subsidiary Agreement on Ocean Industries	Various Locations	1.0	1989	Incentives aimed at improving ocean related industries. One of the biggest single projects will include the upgrading of a shipyard (Gallants Marine Fisheries Limited) located on the West Coast of the Province.
Tourism Development Projects	Various Locations	1.0	1988/1990	Incentives aimed at developing tourist infrastructure (attractions and accommodations). Funded under the Tourism Development Subsidiary Agreement. 70% Federal, 30% Provincial funds.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Unified Family Court Facility	St. John's	1.7	1988/1989	This will replace the original facility which was destroyed by fire. Facility will house the Unified Family Court and auxiliary functions. Provincial funds.
United States Air Force - Facilities Upgrading	Goose Bay	39.8	1988/1990	Expenditures include ramp and taxiway repairs at a cost of $35 million, refurbishing of the hydrant system on ramps 3A/4A, roof replacement on various buildings as well as replacement of Mole Hole backup power.
Upgrading existing Airport Infrastructure	Gander	1.0	1988/1989	Will include the upgrading of existing sewage treatment system and fire training area.
Warehouse	St. John's	1.2	1988/1989	Building is to be constructed by Cabot Development Corporation Limited and will contain 20,000 square feet. Private funds.
Water and Sewer Projects	Various Locations	1.6	1989/1990	Proposals for this fiscal year include the expenditure of approximately $1.6 million among various Labrador communities for the purpose of improving water and sewer systems. Expenditures during 1989/1990 are part of a proposed five year agreement totalling about $13.3 million covering the period 1988/1989 - 1993/1994. Funding would be provided through the Native People's Agreement and is cost shared 66% Federal and 34% Provincial.
Water, Sewer and Paving Projects	Various Locations	35.0-45.0	1989/1990	Various projects. Expenditure program under review. Expenditures are expected to approximate allotments provided in recent years. Provincial and Municipal funding.
Wharf Reconstruction	Argentia	8.6	1988/1990	The project involves the complete reconstruction of the "Fleet Dock". Federal funds.
Wharf Reconstruction	Charlottetown, Labrador	1.9	1989/1990	This project is scheduled to begin the summer of 1989 and be completed in the fall of 1990. Federal funds.
Wharf Reconstruction	Grand Bruit	1.6	1989	This project is scheduled to commence in May 1989 and be completed by November 1989. Federal funds.
Wharf Reconstruction	St. Lewis (Fox Hr.), Labrador	1.8	1988/1989	Reconstruction began in June 1988 and the project is presently 70% complete. Completion is scheduled for October 1989. Federal funds.
Wharf Restoration	Long Pond	3.2	1988/1989	This project is aimed at the restoration of 245 metres of the existing wharf. Federal funds.